

Antiaircraft Journal

PROPERTY OF THE US ARMY

USAADS Library
Fort Bliss, Texas 79916

JULY-AUGUST, 1954



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE AUG 1954		2. REPORT TYPE		3. DATES COVERED 00-07-1954 to 00-08-1954	
4. TITLE AND SUBTITLE The Antiaircraft Journal. Volume 97, Number 4, July-August 1954				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Coast Artillery Training Center,Coast Artillery Journal,Fort Monroe,VA,23651				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 50	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

HONOR ROLL

Original Honor Roll

88th AAA Abn Bn
Lt. Col. E. L. Cormier
228th AAA Group S. C.
Col. T. H. Pope
107th AAA AW Bn S. C.
Lt. Col. E. R. McIver
305th AAA Group N. Y.
Col. J. S. Mayer

Separate Commands

Hq AAA Command
Lt. Gen. J. T. Lewis
Eastern AAA Command
Col. A. G. Franklin
Western AAA Command
Brig. Gen. J. G. Devine
Central AAA Command
Col. D. J. Bailey
AAA Repl Training Center
Lt. Col. E. E. Twining
Hq Far East AAA Spec. Sch.
Col. F. E. Day

Brigades

31st AAA Brigade
Col. H. G. Haskell
32nd AAA Brigade
Col. C. H. Blumefield
34th AAA Brigade
Brig. Gen. F. C. McConnell
35th AAA Brigade
Brig. Gen. T. V. Stayton
40th AAA Brigade
Brig. Gen. E. F. Cardwell
45th AAA Brigade
Brig. Gen. T. W. Parker
47th AAA Brigade
Brig. Gen. F. M. Day
52nd AAA Brigade
Col. B. Thielens
53rd AAA Brigade
Brig. Gen. L. T. Heath
56th AAA Brigade
Brig. Gen. H. F. Meyers
104th AAA Brigade Mass.
Brig. Gen. V. D. Coyne
105th AAA Brigade N. Y.
Brig. Gen. A. H. Doud
107th AAA Brigade Va.
Brig. Gen. J. W. Squire
108th AAA Brigade Ga.
Brig. Gen. G. J. Hearn
112th AAA Brigade Calif.
Brig. Gen. J. W. Cook
261st AAA Brigade Dela.
Brig. Gen. J. B. Moore

Groups

3rd AAA Group
Col. M. G. Weber
5th AAA Group
Col. H. G. Haskell
6th AAA Group
Col. A. A. Adams
7th AAA Group
Lt. Col. R. C. Ball
8th AAA Group
Col. L. J. Hillberg
10th AAA Group
Col. J. C. Bane
13th AAA Group
Col. J. F. Eason
15th AAA Group
Col. P. B. Stiness
18th AAA Group
Col. R. W. Rumph

19th AAA Group
Col. H. A. Gerhardt
26th AAA Group
Col. N. A. Skinrood
28th AAA Group
Col. W. C. Canway
30th AAA Group
Col. P. H. Wollaston
65th AAA Group
Col. H. S. Tubbs
68th AAA Group
Col. G. F. Pierce
80th AAA Group
Col. H. M. Spengler
97th AAA Group
Col. W. F. Spurgin
138th AAA Group
Col. H. B. Hudiburg
142nd AAA Group Ala.
Col. R. M. Hardy
205th AAA Group Wash.
Col. J. H. Pindell
211th AAA Group Mass.
Col. D. MacDuff
213th AAA Group Penn.
Lt. Col. H. A. Cressman
214th AAA Group Ga.
Col. J. G. Johnson
218th AAA Group Penn.
Lt. Col. J. L. Butler
220th AAA Group Mass.
Col. R. H. Hopkins
224th AAA Group Va.
Col. E. W. Thompson
226th AAA Group Ala.
Col. N. J. Walton
233rd AAA Group Calif.
Col. W. T. Stone
242nd AAA Group Conn.
Col. R. Perez
250th AAA Group Calif.
Col. R. B. Williams
260th AAA Group D. C.
Col. G. V. Selwyn
302nd AAA Group
Col. J. M. Welch
313th AAA Group
Col. A. F. Hoehle
326th AAA Group
Col. M. D. Meyers
328th AAA Group
Col. C. C. Parrish
369th AAA Group N. Y.
Col. C. L. Baskerville
374th AAA Group
Col. T. F. Mullaney, Jr.

Battalions

1st AAA Tng Bn
Maj. J. E. Nuwer
2nd AAA AW Bn SP
Lt. Col. R. O. Van Horn
4th AAA AW Bn
Lt. Col. E. O'Connor, Jr.
5th AAA AW Bn
Lt. Col. N. E. Fisher
5th AAA Tng Bn
Lt. Col. C. E. Hogan
7th AAA AW Bn
Lt. Col. M. J. McGuire
9th AAA Gun Bn
Lt. Col. G. N. Wilcox
10th AAA AW Bn
Lt. Col. Samuel May
11th AAA AW Bn SP
Lt. Col. D. A. Gile
14th AAA Gun Bn
Maj. W. H. Sprigs

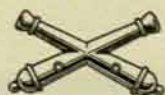
15th AAA AW Bn
Lt. Col. J. C. Evans
16th AAA Gun Bn
Maj. F. X. Gallant
18th AAA Gun Bn
Lt. Col. H. F. Ewing
20th AAA Gun Bn
Lt. Col. C. F. Ottinger
21st AAA AW Bn SP
Lt. Col. J. F. Stabler
22nd AAA AW Bn
Lt. Col. W. H. Barnscheuer
28th AAA Gun Bn
Lt. Col. J. A. Ward, Jr.
32nd AAA Gun Bn
Lt. Col. H. G. Cummings
35th AAA Gun Bn
Lt. Col. L. H. Kirk, Jr.
36th AAA Missile Bn
Lt. Col. E. R. Gooding
37th AAA Gun Bn
Lt. Col. J. H. Brubaker
38th AAA Gun Bn
Lt. Col. R. T. Shugart
39th AAA AW Bn
Lt. Col. F. D. Pryor
40th AAA Gun Bn
Lt. Col. W. H. Hubbard
41st AAA Gun Bn
Lt. Col. W. T. Lind
42nd AAA Gun Bn SP
Lt. Col. J. E. Arthur, Jr.
46th AAA AW Bn SP
Lt. Col. R. M. Walker
49th AAA Gun Bn
Lt. Col. C. C. Hines
50th AAA AW Bn SP
Lt. Col. W. C. Boyce, Jr.
52nd AAA Gun Bn
Lt. Col. J. A. Rogers
56th AAA Gun Bn
Lt. Col. W. Y. McCachern
60th AAA AW Bn
Lt. Col. W. D. Ward
64th AAA Gun Bn
Lt. Col. A. H. Booth
66th AAA Gun Bn
Lt. Col. J. C. Wilkerson
68th AAA Gun Bn

69th AAA Gun Bn
Lt. Col. M. G. Moyer
70th AAA Gun Bn
Lt. Col. C. F. England
71st AAA Missile Bn
Lt. Col. V. A. MacDonald
76th AAA AW Bn SP
Lt. Col. K. R. Philbrick
77th AAA Gun Bn
Lt. Col. L. A. Twomey
83rd AAA Gun Bn
Lt. Col. P. B. Wolff
92nd AAA AW Bn
Lt. Col. S. C. Farris
93rd AAA Gun Bn
Lt. Col. B. B. A. Haenel
94th AAA AW Bn SP
Lt. Col. A. K. King
95th AAA Gun Bn
Lt. Col. K. R. Nelson
96th AAA Gun Bn
Lt. Col. C. M. Pentecost
97th AAA Gun Bn
Lt. Col. K. Ditttrich
102nd AAA Gun Bn N. Y.
Lt. Col. E. R. Welte
106th AAA Gun Bn N. Y.
Maj. J. B. McManus

125th AAA Gun Bn Va.
Lt. Col. T. J. Buntin
126th AAA AW Bn Mass.
Lt. Col. R. C. Carrera
129th AAA AW Bn Va.
Lt. Col. G. D. Eastes
130th AAA AW Bn SP N. C.
Lt. Col. W. Lamont, Jr.
168th AAA Gun Bn
Lt. Col. M. C. Macy
243rd AAA AW Bn R. I.
Lt. Col. E. E. McMillan
245th AAA Gun Bn N. Y.
Lt. Col. C. Davidson
248th AAA Gun Bn Illinois
Lt. Col. A. C. Androe
271st AAA Gun Bn Calif.
Lt. Col. V. S. Matthews
340th AAA Gun Bn D. C.
Lt. Col. R. T. Bard
418th AAA Gun Bn Va.
Lt. Col. W. K. Adams
450th AAA Gun Bn
Lt. Col. G. W. Shivers, Jr.
459th AAA Gun Bn
Lt. Col. C. D. Sauvinet
466th AAA AW Bn
Lt. Col. S. M. Arnold
495th AAA Missile Bn
Lt. Col. B. H. Backstrom
496th AAA Gun Bn
Lt. Col. H. L. Dickey
505th AAA Missile Bn
Lt. Col. M. E. Chotas
506th AAA Gun Bn
Lt. Col. J. H. Valliere
507th AAA Gun Bn (75mm)
Lt. Col. J. A. Laing
513th AAA Gun Bn
Lt. Col. H. McLaughlin, Jr.
516th AAA Missile Bn
Lt. Col. A. H. Manguso
518th AAA Gun Bn
Lt. Col. D. C. Sherrets
519th AAA Gun Bn
Lt. Col. A. E. Holt
526th AAA Missile Bn
Lt. Col. R. W. Molloy
531st AAA Gun Bn
Lt. Col. P. J. Gundlach
549th AAA Gun Bn
Lt. Col. E. Mountain
550th AAA Gun Bn
Lt. Col. F. E. Terry
551st AAA Gun Bn
Lt. Col. C. M. Allen
554th AAA Gun Bn
Lt. Col. F. J. Lagasse
601st AAA Gun Bn
Lt. Col. E. E. Bellonby
605th AAA Gun Bn
Lt. Col. F. J. Roddy
701st AAA Gun Bn
Lt. Col. P. A. Ferrell
709th AAA Gun Bn Penn.
Maj. W. Yapple
719th AAA Gun Bn Calif.
Lt. Col. W. W. Morse
720th AAA Gun Bn Calif.
Lt. Col. G. A. Duke
724th AAA Gun Bn Penn.
Maj. J. L. Knotts
725th AAA AW Bn N. C.
Maj. J. C. Maulsby
728th AAA Gun Bn Calif.
Maj. J. E. Huntsman
737th AAA Gun Bn
Lt. Col. B. W. Perry

(Continued on Cover 3)

THE UNITED STATES
ANTI-AIRCRAFT
ASSOCIATION



OFFICERS

LT. GEN. LEROY LUTES
HONORARY PRESIDENT

LT. GEN. JOHN T. LEWIS
PRESIDENT

LT. GEN. LYMAN L. LEMNITZER
VICE-PRESIDENT

BRIG. GEN. CHARLES S. HARRIS
SECRETARY-TREASURER

ADDITIONAL MEMBERS OF THE
EXECUTIVE COUNCIL

MAJOR GENERAL WILLIAM F. MARQUAT

MAJOR GENERAL CHARLES G. SAGE

COLONEL JOHN S. MAYER

COLONEL DARWIN D. MARTIN

COLONEL GEORGE V. SELWYN

LIEUTENANT COLONEL JOHN E. CONNOR

LIEUTENANT COLONEL OTHO A. MOOMAW

The purpose of the Association shall be to promote the efficiency of the Anti-aircraft Artillery by maintaining its standards and traditions by disseminating professional knowledge, by inspiring greater effort toward the improvement of matériel and methods of training and by fostering mutual understanding, respect and cooperation among all arms, branches and components of the Regular Army, National Guard, Organized Reserves, and Reserve Officers' Training Corps.

The JOURNAL prints articles on subjects of professional and general interest to personnel of the Anti-aircraft Artillery in order to stimulate thought and provoke discussion. However, opinions expressed and conclusions drawn in articles are in no sense official. They do not reflect the opinions or conclusions of any official or branch of the Department of the Army.

The JOURNAL does not carry paid advertising. The JOURNAL pays for original articles upon publication. Manuscript should be addressed to the Editor. The JOURNAL is not responsible for manuscripts unaccompanied by return postage.

PUBLICATION DATE: AUGUST 1, 1954

Antiaircraft Journal

FOUNDED IN 1892

Published from 1892 until 1922 as
THE JOURNAL OF THE UNITED STATES ARTILLERY
Published from 1922 until 1948 as the
COAST ARTILLERY JOURNAL

VOL. LXXXVII

JULY-AUGUST, 1954

No. 4

CONTENTS

COVER: Target Practice in the 68th AAA Group. A PAPER RESERVE IS NOT ENOUGH. By Maj. Gen. B. L. Milburn	2
PREVENTIVE MAINTENANCE. By Brig. Gen. H. F. Meyers	5
NEW CRISES THREATEN IN KOREA AND INDOCHINA. By Brig. Gen. Thomas R. Phillips, USA (Retired)	8
CAREER MANAGEMENT	10
ELECTRONICS AND MEN. By Lt. Col. L. M. Orman	12
HERMANN GÖRING ANSWERS THE \$64 QUESTION. By Brig. Gen. William W. Quinn	14
SECURITY CONTROL IN THE SOVIET ARMY. By Lt. B. L. Grayson	15
MAJOR BARTLETT AND THE GREAT GOD THOR. By Lt. Col. Earle Mountain	18
AAA OPERATIONS CENTER. By Lt. Col. L. M. Orman	22
STUDY OF MILITARY HISTORY	23
BEFORE YOUR UNIT MOVES. By Captain Carl M. Guelzo	24
MOBILE AN/TPS-1D. By Major Victor DeStefanis	27
SKYSWEEPER IN GROUND SUPPORTING FIRES. By Maj. D. B. Millar	28
DO YOU KNOW MILITARY DISCIPLINE? By Lt. Col. R. M. Huston	29
THE ARMY LANGUAGE SCHOOL. By Capt. B. B. Nichols	30
ROK OFFICERS' CLASS. By Capt. Wm. F. Brown	31
ROTC ASSOCIATION MEDAL WINNERS	32
UNIT ACTIVITIES	33
LETTERS TO THE EDITOR	39
FORT BLISS NEWS	40
NEWS AND COMMENT	43
BOOK REVIEWS	45

BRIG. GEN. CHARLES S. HARRIS, USA, Ret., Editor
M Sgt Fred A. Baker, Business Manager
SFC James E. Moore, Jr., Editorial Assistant
SFC Paul M. Plumly, Circ. Mgr.

PROPERTY OF THE U. S. ARMY



A PAPER RESERVE

Address by Major General Bryan L. Milburn at the annual convention

IN the realization of the present state of world tension, we have—and properly so—rejected unpreparedness. At the same time we have rejected the policy of maintaining Armed Forces at full war strength, not only for compelling economic reasons, but also for the reason that prolonged full mobilization would imperil our entire culture and our liberties—the very things which these forces are intended to guard and preserve. Even if free people would endure the sacrifices and hardships of all-out mobilization in a period of uneasy peace, such a program would defeat its purpose—first by destroying the economy which is an inseparable part of our military strength, and eventually by robbing us of the freedom we sought to defend. Accordingly, the alternate program is one of defense for the free world geared to the long haul; one which can be borne by the United States and our allies indefinitely.

We have thus adopted a middle ground between unpreparedness and full mobilization. In adopting such a middle ground, however, we must fully appreciate what it imposes. We have clearly staked our national security on our ability to mobilize our partial or full military strength with far greater speed than ever before.

Of course, it is no longer possible, if it was ever possible, for “a million men to spring to arms overnight.” War is not that simple. It has become an exact, an exacting and a very complex science. A man can no longer take down from the mantelpiece his trusty musket and by forming in ranks on the Village

Green become a qualified soldier. We know from bitter experience how long it takes to turn our potential military strength into effective fighting forces. We know that unless we have a properly organized, highly trained, active and vigorous reserve to form the bulk of our forces, based on the nucleus of a limited regular establishment, we will not have those forces in time. In discussing current studies designed to improve the readiness of our reserve forces, Secretary of Defense Wilson recently stated in a semiannual report: “These studies should establish a greatly improved reserve program, effectively adjusted to the present-day requirements for rapid mobilization and entrusting to the reserves a more vital defense role than ever before in their history. The need for a more effective reserve program has increased with the probability that our country itself might come under direct attack upon the outbreak of hostilities and that trained reserve units must be available for deployment immediately, not nine to twelve months later. A greater state of readiness for our reserve forces is essential if we are to remain strong militarily and economically over an indefinite period of time.”

THIS then is our real purpose in maintaining reserve forces—the saving of mobilization time and, of course, the encompassing purpose of saving lives of our troops, including reservists, by eliminating the necessity of committing them to battle before they are adequately organized and trained. Accordingly, the true test of the effectiveness of our reserve forces lies in the answer to the question: how much mobilization time can be saved by their organization and training?

We will always need individual rein-

forcements, and Department of Army requirements for such individuals have recently been materially increased. When mobilization of our reserve forces is required, however, complete units must be ready. We have definitely discarded the old concept of mobilizing only cadres to be used as a nucleus for the subsequent assignment of the remaining, untrained and larger element of a unit. Unless the unit as a whole is organized and given some training in time of peace, it will not be ready for mobilization and the required additional advanced training for early deployment after mobilization. In this connection it should be borne in mind that the proportion of active forces in being to total mobilization requirements is much smaller in the Army than for any other Service. Hence, the Army's particular need for strong reserve forces, especially organized units.

Most of us are familiar with a logistical term called “production lead time.” Let us apply this term to our reserve units in measuring their value in any future national war effort. A division force of pretrained reservists, properly organized and trained while in reserve status, could be mobilized and deployed in five months. A draftee division force, without such pretraining, requires more than 10 months, assuming the availability of a trained cadre to start with. If we do not need this division force until Mobilization Day plus 10 months, we can start from such a cadre on M-Day and produce it. Bearing in mind, however, that these reservists who engage in peacetime military training are primarily civilians and as such work regularly in stores, factories, government, as teachers, lathe operators, truck drivers, clerks and butchers, would not both the civilian economy and the war effort benefit by leaving them in their civilian jobs for five months before calling them to active duty?

General Milburn, well known Antiaircraft commander in World War II and more recently the G1 and Deputy Chief of Staff of FECOM, now serves as the Special Assistant to the Chief of Staff for Reserve Component Affairs.

IS NOT ENOUGH

ve Officers' Association in Omaha, Nebraska, 17 June 1954

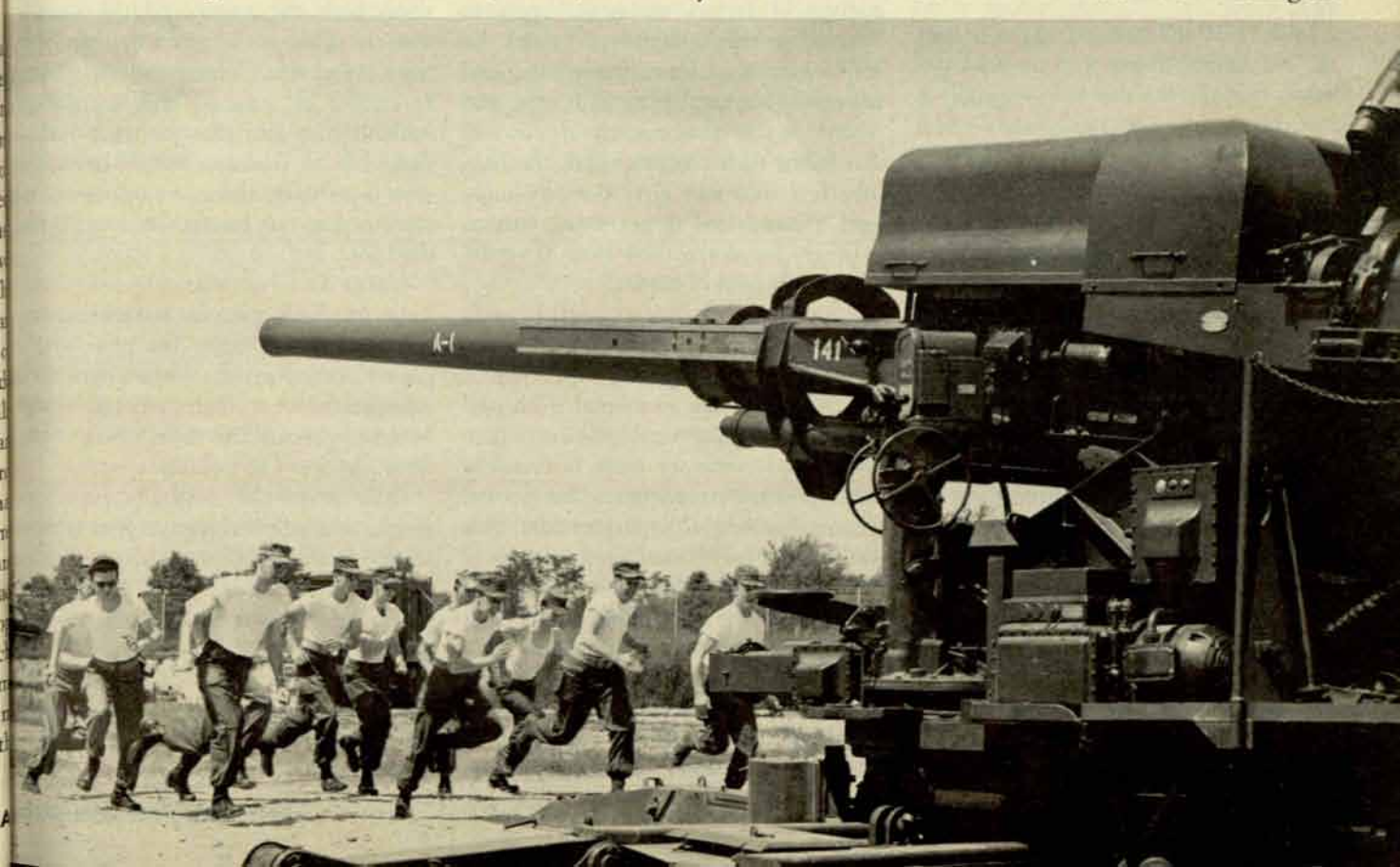
FURTHER, consider the saving in Active Army, Navy, or Air Force facilities necessary to house them, feed, care for, and train them and the cost in overhead personnel, utilities, and money required to support such operations. It is obvious that in organizing and training reservists while they retain their civilian jobs, as citizen-soldiers, we gain in two ways: first, by lessening the shock on the civilian support of a war, which you must agree is essential; and second—by cutting in half the overhead required to produce, after M-Day, effective forces by a given date. For those who might contend that we cannot afford the monetary cost of the kind of reserve we need, we might compare reserve costs with the ex-

tra 5-months active duty pay and allowance required to produce an equivalent division force from the induction system after a war starts. Add to this the capability of producing two division forces in the time formerly required for one, using the same overhead and same facilities, and our reserve forces have proved their worth beyond question.

Do we today have—immediately available—the kind of reserve we need? The answer is definitely no. We do, however, have the foundation upon which we can achieve such forces within the span of 3 to 6 years, given the necessary authority and proper understanding and support by our people. Speaking for the Army, we have great potential strength

in the hundreds of thousands of reservists who have returned and are returning to reserve status from two years' active service and in the many thousands who will return in the near future. One of the important results of the Korean war is that it has replenished the pool of trained military manpower, and particularly the combat trained pools in our civilian population. Today, by law, every man who enters the Army from civil life goes through 24 months of military training and service and comes out with 6 years of compulsory membership in the Army reserve ahead of him. In the Navy and Air Force the normal active duty tour is 4 years with 4 years in the reserve. This adds tremendously to our military

Gun crew of Battery A, 340th AAA Battalion, DCNG, in a Sunday alert drill on their site in the AAA defenses of Washington



potential; a potential which cannot be wasted if we are to have trained reserve forces immediately available for an emergency. Accordingly, these obligated reservists must be required to participate in reserve training programs to the extent required to maintain their readiness for an emergency. It is appreciated, however, that steps should be taken to the extent practicable to prevent a possible inequity to veterans, particularly combat veterans, which may result if they should be required to serve again in a limited emergency such as Korea. The Department of the Army feels that this can be accomplished by the induction of a substantial number of non-prior service personnel who would undergo an intensive period of initial or basic training. If this whole reserve could then be screened repeatedly to insure that all assigned to the reserves would be actually available in case of emergency, both the inadequacies and inequities of our reserve program would be eliminated.

Such a Reserve program would be able to produce trained individuals and units truly capable of deployment in a relatively short time as cohesive fighting teams. It would meet the full requirements of a sound, strong and equitable reserve: highly trained, without significant attrition, and instantly available.

MEANWHILE, in relying so heavily on our reserve forces we are taking a heavy risk, the risk that they may not, in fact, be ready when the country needs them. A reserve which is not ready when needed is not a reserve; like a worthless check that cannot be cashed—it only gives us a false sense of security.

Therefore, some way, somehow, our reserve program *must* be made to work. One thing is certain: it will never work without public understanding and support. The patriotic and invaluable service which our citizen-soldiers, sailors, airmen and coast guardsmen have contributed and are now contributing toward the defense and security of our country in these times of uneasy peace is not fully appreciated by our people as a whole. The citizen-soldier is, in many ways, a unique individual. The Chief of Staff of the Army, General Matthew B. Ridgway, recently paid this tribute to the citizen-soldier: "It was through the efforts of citizen-soldiers, under the



418th AAA Gun Battalion, Danville, Va. on firing range at Bethany Beach, Dela.

leadership of the immortal Washington, a citizen-soldier himself, that this nation was brought into being. They established the tradition of service which has been this nation's shield against the dangers which have threatened it during its 179 years of existence." The citizen-soldier is not understood by many of his fellow citizens. Some accuse him of wanting to join a military unit for pay and retirement benefits alone. That point of view is not convincing for we had plenty of citizen-soldiers before any such benefits were authorized by the Congress. Why does the citizen-soldier want to identify himself with the military? I do not know what the true answer is except that I know it cannot be found by cold analysis of factors we might apply to business or social affiliations. I think the real reason is at least closely identified with the elemental truth that men and women of this great country of ours feel that when their country needs the help they feel they can give, they willingly lend a hand and if necessary, just as willingly lay down their lives, if necessary on the field of battle.

I have found in my long experience in the Army that this elemental truth permeates the regular establishment where the limited monetary wage is certainly not a primary consideration for service. George Fielding Eliot expressed it this way: "The gray-haired men who wear stars on their shoulders have grown up with this truth. They understand it: it is bred into their souls, their hearts, their minds. They cannot always explain it, but it is always remembered in all they do. They live day by day with the fact that their profession, unlike any other,

finds its ultimate expression in the demand for sacrifice—the sacrifice of life itself by individuals in order that the life of the nation may be preserved."

So let us give the citizen-soldier credit for this same sort of inborn patriotism for I am sure he possesses it. At least, he has the very laudable desire to be identified with a time-honored profession whose principal function is service to our country and to associate with men of action, courage, confidence and pride, whose lives are devoted to that profession. I am confident that when a citizen-soldier walks into an armory and says, "I want to sign up," his motive is in his heart and in his blood and not in his pocketbook. So let us do all we can to stress both the value and the worthy motives of the citizen-soldier, emphasizing the fact that a sound national security cannot be attained and maintained without him and that we as a nation should thank God that we still have men who want to do their part in preserving the freedom our forefathers fought and died for.

Unfortunately, there are many cases today in which reservists are willing and ready to participate in the reserve program but their wives, their mothers, their sweethearts and their employers are bringing pressure on them to stay away from any form of military service.

Only when they and the American people as a whole recognize that reserve service is the only practical alternative to full-time military service on a much larger scale, for much longer periods, and at much greater costs, will we really begin to have the reserve forces that we must have to deter aggressive acts against us and that we must have to achieve peace through preparedness.



PREVENTIVE MAINTENANCE

Address by Brigadier General Harry F. Meyers, Commanding General, 56th AAA Brigade, to class attending Army Field Force Commanders Preventive Maintenance Course, Aberdeen Proving Ground, Maryland on 19 May 1953.

GENTLEMEN, if Benjamin Franklin were alive today, assisting in this course and writing his Poor Richard's Almanac, one quote for posterity would undoubtedly read: "A little neglect may breed mischief; for want of a proper valve stem, the air was lost; for want of the air, the tire was lost; for want of the tire, the jeep was lost; for want of the jeep, the message was lost; for want of the message, the battle was lost" . . .

Thirteen months ago, I attended this course as a student. . . . One of the points stressed for all commanders was the importance of conducting courses and programs at home stations to cover the Army Maintenance System and to stress preventive maintenance. . . . On completion of the course here, I returned to Fort Devens with several pounds of pamphlets, which you will receive, but no post level plan. . . . As Commanding General of Fort Devens and of the 56th AAA Brigade, I felt that such a course should be provided for the two commands. . . .

No other officers in either command had attended this course. . . . First, I had to indoctrinate my S4 with the importance of such a course. . . . He then, with command pressure, had to indoctrinate the special staff. . . . I gave the S4 an outline of what I wanted, which in simple language, was a condensed version of this course. . . . The first two attempts by the staff were miserable. . . . On the third, the course started to take shape. . . . On the 3rd of June the course was held in the post theatre at Fort Devens and repeated on the 4th. . . .

My instructions were that every officer and warrant officer, male and female, would attend the course. . . . All commands wailed. . . . The surgeon said: "I only have one eye, ear, nose and throat doctor"; the reception center commander screamed; the nurses could not be let off. . . . I was immune to every cry. . . .

As you go through this course, visualize it all being condensed into six hours of classroom instruction and one hour of county fair type practical work. . . . Gentlemen, it can be done. . . . At Devens, one half of the officers attended each period one day or the next. . . . Leaves and passes were suspended. . . . If a doctor had to operate on the morning of the 3rd, he attended the class he missed, on the 4th. . . .

We uncovered some outstanding instructors. . . . The Chemical Officer with his droll wit had the class in an uproar. . . . When I say class, there were over 200 each day. . . . The Quartermaster had stage settings that moved with the precision of a professional TV show. . . . I would like to add, however, that in order to conduct a satisfactory course in preventive maintenance, the commander must have a special staff. . . . Without the expert assistance of the Engineer, Quartermaster, Medical, Signal, Chemical, Transportation and Ordnance Officers plus their civilian specialists, the school or program will fail. . . .

From a beginning of doubt and resentment, the course developed into an interesting and worthwhile endeavor. . . . Now for results:

Four commanders throughout the Zone of Interior sent for copies of our plan for use at their posts after we sent a copy to the school here for information. . . .

Every officer, warrant officer and nurse who attended the Fort Devens School was enthusiastic over the course and expressed their appreciation. . . . One nurse told me personally that it was the first time preventive maintenance had meant anything to her. . . . One of the most pertinent remarks was by a Lt. Colonel of Infantry with an outstanding World War II record. . . . He graduated from West Point in 1939. . . . He asked me: "Why wasn't I given a course like

this when I graduated from West Point?" I could only answer that commanders in 1939 were not very enthusiastic about wasting time on preventive maintenance. . . .

If It Looks Good

THE next part of my talk will be devoted to pointing out some of my experiences during the last 35 years from Private to Brigadier General with 22 years in the company or battery grades which illustrate my answer to the Lt. Colonel. . . . I shall call it "Command Hysteria" or "If It Looks Good, It is Good" . . .

Example 1. Between World War I and World War II, a certain Commanding General of the Hawaiian Department decided that with the loss of most of his horses, the next best show would be a motor show. . . . Each and every mobile unit had their own eliminations and then the finals were held. . . . This was in the early days of motor vehicles in the Army and this General decided that overall appearance would be the criterion. . . . The unit winning vehicles were properly manicured, repainted and on the display line by daylight with the handlers busy until inspection time with chamois skins and fine brushes. . . .

The inspecting party, consisting of the commanding general and his Staff, dressed in boots, spurs and white gloves, paraded back and forth, around and under some 20 prize vehicles. . . . Finally, a 2 and ½ ton truck—I say a 2 and ½ ton—it was similar to our present trucks in overall size and general body design—received first prize. . . . It was a thing of beauty and a joy forever. . . . Every removable item of the body and motor had been removed and nickel plated. . . . The tires were painted with a lacquer of some kind that glistened in the sun.

... The body was beautiful. ... All oil and grease openings were painted a bright red. ... I suspect that some descendant of Nippon had assisted as the colors were blended together like on a Japanese pagoda. ...

After the award, the story varies slightly. ... The losers claimed the truck didn't have a motor. ... All agreed that the truck had been towed to its position. ... The best story is that after the award, the Commanding General directed the Sergeant to drive the truck away. ... The Sergeant, being one of the old-timers, got into the driver's seat, noted the truck was on a slope, released the brake and the truck moved off. ... Rumor has it that the Commanding General exclaimed to his staff: "See, it not only looks the best but the motor is so silent that you can't hear it run" ...

Example 2. Captain A was very ambitious. ... He secretly had all the helmets of his battery painted a glossy olive green, of his own blending, the bayonets nickel plated and then, unknown to the other battery commanders, turned out for a regimental inspection. ... The colonel commended the officer, making him an early candidate for the Command and General Staff School, and ordered all other battery commanders to follow suit. ... No one could copy the paint mixture, and the other battery commanders did not force their men to contribute to a slush fund for nickel plating. ... The colonel should have court-martialed the officer, as shortly after Captain A left for the Command and General Staff School, Ordnance requested all helmets and bayonets be turned in for modification and Captain A's successor had a very bad time getting Ordnance to accept the items as they had been changed from their original specifications. ...

Example 3. This is a very broad one. ... Every battery always had a duplicate set of "Inspection" dishes and kitchen equipment. ... Also on field inspections, a comb, brush, toothbrush and shaving equipment that had never been used. ... As one of the silly things, for years after shaving cream was universally used, each man had to have a shaving brush and a cake of shaving soap for the annual I.G. inspection. ...

Example 4. Captain B in Panama many years ago, who retired recently as a brigadier general, required each man

in his battery to purchase a tailor-made German khaki uniform, Stetson hat and shoes of the same make and color. ... Each guide was required to have a distinctive colored pair of shoes. ... Naturally, at 21 and 30 dollars a month for base pay, his battery personnel had no money for months. ...

Example 5. A Colonel in command of the AAA Regiment in which I commanded a searchlight battery was old "Spit and Polish" himself. ... Long after other outfits were wearing trousers, our regiment wore breeches and boots. ... Only a complaint to the Army I.G. stopped him from forcing all to purchase clothing locally as the Quartermaster had ceased to stock breeches or boots. ... Before each monthly motor and equipment inspection, batteries were required to repaint all vehicles, including motors, and all equipment. ...

One hot summer day I received sealed orders to make a 25-mile march, including supper in the field, return to the post and have all my searchlights in operation at 2000 set up around the parade ground. ... The Colonel then came around to inspect. ... The engine exhausts were red hot from the muffler clear up to the engine block. ... The Colonel started giving me a good going over for not cooling my engines properly. ... My reputation does not bear any evidence that I submit to such treatment submissively and I flared back at him and said: "This is your fault, Sir, not mine." ... He was a rather large and red-faced person of very pompous and positive appearance and views. ... When his blood pressure came down, I repeated my accusation and then added: "You require us to paint our motors monthly. ... This seals the heat in the engine head and does not give the motor a chance to cool by normal radiation from the metal. ... Motors should not be painted this way." ... I asked him if he had his own car engine painted monthly. ...

Everyone, including myself, expected disciplinary action but early the next morning after the motor, the colonel and I had all cooled down, the colonel came down to my motor shed. ... With the aid of a microscope and a piece of paint chipped from the engine, we were able to count 13 layers of paint. ... On the next inspection, all paint had been removed and the Colonel and I have

always been the best of friends. ...

Example 6. Just before Pearl Harbor, I commanded the searchlight battalion of the AAA regiment in Hawaii. ... In this battalion there were around 300 wheeled vehicles including the searchlights which were on wheels with wheeled power plants. ... Training schedules never allowed enough time for proper maintenance. ... Try as I might, every afternoon the troops devoted their time to manicuring the parade ground and lawns around Department Headquarters. ... In desperation, I set up a battalion inspection team. ... There were ten inspectors and one sergeant recorder. ... Vehicles rolled onto the inspection rack. ... Each man checked 8 items. ... All we did was record deficiencies with no attempt to correct. ... We were finally able to inspect one vehicle every 10 minutes. ... After this, the vehicles were returned to the battery shops with the check lists for action. ...

I then had the colonel come around to my battalion inspection rack, showed him our procedure, multiplied the time to inspect one vehicle by the number of vehicles, pointed out the number of inspections required by regulations by the different echelons of command and begged him for more maintenance time. ...

He just stood dumbfounded, shook his head and turned me down. ... He was afraid to make an issue of this with the next higher headquarters and clung to his 1910 ideas of "Just Polish the Equipment for Inspections" ...

Example 7. This will be my last one. ... I will not identify this any more than to say that I was present and it happened after the Korean War started. ... A very senior commander was inspecting gun crews and motor vehicles. ... The work clothes of the men were of every shade. ... Different manufacture, government, civilian and personal laundries, varied material—You have all seen the condition, particularly in 1950 and 1951. ... The inspecting officer said: "Have these men draw new work clothing of the same shade" ... The clothing was clean and we were at war. ... This same inspector saw a man with a small tear in the sleeve of his field jacket. ... He said: "Come here, young man" ... He grabbed the tear in the sleeve and proceeded to rip the sleeve

from shoulder to cuff and ordered the man to draw a new jacket. . . . As you will learn here, the proper procedure would have been to talk to the man on preservation and timely repair and not destroy a usable garment. . . . This same officer is very conscious of preventive maintenance when it comes to guns, fire control equipment and vehicles but he should have been trained in this school before being allowed to inspect. . . .

In the above examples of "How Not To Do It," I have tried to point out five principles of supply economy:

- ▶ Proper care, preservation and timely repair. . . .
- ▶ Use of supplies and equipment for their intended purposes only. . . .
- ▶ Only the amount of material necessary to accomplish the desired results. . . .
- ▶ Safeguarding against loss and damage. . . .
- ▶ Prevent oversupply and hoarding. . . .

Before leaving the "Good Old Days," let me give you one example of perfect preventive maintenance. . . . In our old seacoast batteries, we were always allowed one or two battery mechanics, depending on the size and type of battery, who were corporals or the equivalent in specialist grade. . . . These mechanics lived at the emplacements and were on full time special duty. . . . I had a mechanic in a 12-inch gun battery at Corregidor in 1930-1932 who typifies the perfect preventive maintenance pattern. . . . He would often work most of the night to finish some job he had started. . . . My battery could be inspected day or night by any echelon of command and it would always be in a perfect shape. . . . Oh yes, once a month this man took his three-day pass, but we don't need to go into that.

NEXT I will deal with preventive maintenance as observed in the United Kingdom and Pakistan. . . . I discussed this while in class here and was invited back so I'll take a chance on being thrown out this time. . . .

In the British Commonwealth countries, the services are represented in all T/O&E units. . . . In England, the corps responsible for this is called the Royal Electrical and Mechanical Engineers. . . . During the spring of 1943, as an observer for the Army Ground Forces, I visited most of the antiaircraft

and seacoast schools, firing points, test centers and many defenses in the United Kingdom. . . . I was amazed at the care that was taken of the equipment. . . . On study, I found that at an antiaircraft firing point or other installation or unit of any branch, you would find a representative of the Ordnance, Signal Corps, Engineers, Quartermaster in each unit where there was Ordnance, Signal, Engineer or Quartermaster equipment. . . . These men were actually enlisted staff officers at each level of command. . . . They were in exactly the same category for promotion, etc., as any of the Signal officers or Engineer officers in our service. . . . School trained men were never lost as they retained their own branch designation and were tested periodically by members of their own corps. . . .

While Senior Military Attaché in Pakistan, I visited the Kashmir fighting front, all divisions and regiments, as well as the schools in that country. . . . Without the Pakistan electrical and mechanical engineers, preventive maintenance would have been nil. . . . Because of superior maintenance, the Pakistan Army is ready for combat at all times. . . .

I know that during my service, the American Army will not adopt this procedure. . . . I know it works better than our own system and am throwing it out to you as something to think about in the future. . . . We carry Medical personnel in our T/O&E's, why not the other services? In all AAA defenses today we have, or are supposed to have, Ordnance integrated fire control repair detachments, consisting of one Warrant Officer and seven enlisted men. . . . Also Ordnance artillery maintenance or repair detachments which are cellular units of the same T/O&E. . . .

Now unfortunately, these units are assigned to the continental armies and are not under the command of the AAA defense commanders. . . . Here we have a perfect example of Ordnance support but the using unit does not have the authority to command these units but is still responsible for the results. . . .

Thirteen months ago, a representative of the Ordnance stated from this platform that the schools here had trained 18,000 men during the Korean War but that only 6,000 could be traced to doing the job for which they were prepared. . . . My reaction is that this is a very poor return for the money and time

spent in training preventive maintenance and repair personnel. . . . The same thing is undoubtedly true in the other schools. . . .

As Commanding General of all the AAA Units of the Antiaircraft Command in the First Army Area, I would say our outstanding problem of preventive maintenance is the same as that encountered throughout the Armed Forces. . . . No stability in our personnel and reduced T/O&E's. So long as our personnel situation is critical, our preventive maintenance will suffer. . . .

One of the training division commanders told me that he had about 200 vehicles and less than 100 drivers authorized in his T/D. . . . We have to accept such reductions, but it places a very difficult problem in the hands of a commander. . . .

My former Brigade S3 is now commanding a medium artillery battalion in Korea. . . . In a recent letter he spoke of the maintenance problems. . . . Even at full strength, he has plenty of headaches. . . . I am sure all of us are more conscious of this maintenance "must" than ever before in our Armed Forces. . . .

You can inspect, instruct, work yourself to death but if and so long as battery commanders change often, enlisted NCO's refuse to reenlist, overseas levies hit the best men; our cost of maintenance will go up and up. . . . You will hear lectures here regarding Ordnance, Engineer, Signal and Quartermaster Inspector-Instructor Teams. . . . When you can get them, they are wonderful. . . . However, continental armies are being reduced in personnel, both civilian and military. . . . If the doctrines taught here could be carried out, we would be well on the road to a high level of preventive maintenance. . . .

As I have implied, I cannot speak too highly of this course. . . . Preventive Maintenance is a Command Responsibility. . . . However, commanders must be given the means and authority to carry out their duties. . . .

In conclusion I would like to recommend that a sound movie be made of this course, or at least the highlights of the course. In order to spread the gospel in my command, I could use at least three sets of these films to good advantage. . . .

A TV program would be better but that will come in the future. . . .



New Crises Threaten in Korea and Indochina*

By **BRIG. GEN. THOMAS R. PHILLIPS, U.S.A. (Retired)**

Military Analyst of the Post-Dispatch

Army Already Is Spread Perilously Thin—Career Personnel Are Quitting the Service.

ALMOST anything can happen in the Far East. With the end of the inconclusive talks on Korea at Geneva, the South Korean President, Syngman Rhee, feels free to unify Korea by his own means, including war if necessary.

"Our side is free to take action," Foreign Minister Yung Tai Pyun said at Geneva. "My Government will not waive its right to North Korea or leave it to be colonized by Chinese invaders."

The new Premier of France, Pierre Mendes-France, has promised to make peace in Indochina by July 20 or hand in the resignation of his government. While declaring that "France will remain in the Far East," he speaks of "sacrifices of territory that even now the situation does not require."

"Risk of Atomic War"

Mendes-France believes that "if the conflict in Indochina is not settled and settled very quickly, it is a risk of war, of international war and perhaps atomic war, that must be envisaged."

In Korea the relative military posture has changed very little. The United States has withdrawn two divisions from the Far East, but still has five Army and one Marine divisions in Korea and one Army and one Marine division in Japan. The British Commonwealth Division is still in Korea.

The Air Force has withdrawn one medium bombardment wing to be re-equipped with B-47s in the United States.

Due to rotation and the long period without combat, the ground and air forces in Korea are relatively inexperienced

and do not have their former effectiveness.

The South Korean army has improved steadily since the armistice. It has 20 divisions, 16 of which are battle experienced. The Koreans have organized a field army and several army corps. All their own divisions, except the First ROK Division, are commanded by Koreans through these higher commands.

Training of the South Koreans is intense. They work at it for longer hours each day and more days each week than our forces do. An extensive school system, based on American practice, is maintained and the competition for higher training is intense. Many Korean officers are sent to military schools in the United States. It is rarely that one falls below the first 10 per cent of the class in final grade.

Majority of Troops Train

The front is fully occupied with all the outposts manned. The bulk of the troops are required to be within six hours distance from the main defensive positions. This permits training to be carried on by the majority of the troops.

On the other side the Chinese and North Koreans are maintaining approximately the same forces that were in North Korea when the armistice went into effect. There is no such extensive rotation on their side of the lines as there is on ours, so their ground forces are mostly battle-experienced.

Airfields have been reconstructed and new ones built in large numbers. If the conflict were reopened it is probable that the enemy would attempt to oppose the United Nations in the air from bases in North Korea.

Red dispositions are not offensive.

Most of the troops are in rear areas. Defensive fortifications have been constructed in great depth by the Reds, going as far back as 30 miles.

On the South Korean side, however, civilians, who had been evicted from the land to a depth of many miles from the front while the war was going on, have been allowed to return and take up their normal occupations. Defensively, therefore, the United Nations forces are not in as good a position as the Reds.

There is no evidence that the Reds are planning to reopen the conflict. Chinese are colonizing North Korea, which lost half its population of 8,000,000 in the war. The best evidence of the peaceful outlook for the time being is the presence of Gen. Maxwell D. Taylor, commander of the United Nations forces in Korea, in the United States on leave.

The armistice provided that the forces and armaments in Korea could not be increased. A Neutral Nations Supervisory Commission was provided to check for violations. The inspection teams come from Sweden, Switzerland, Poland and Czechoslovakia.

Certain ports of entry by air, sea and land were designated. These actually include all the ports of entry used by the United Nations in Korea. In North Korea, however, the long boundary with Manchuria and Siberia makes it easily possible to evade the armistice provisions on forces and equipment.

Swiss, Swedes Complain

In North Korea, the Reds have placed every obstacle in the way of the Swedish and Swiss members to prevent them from carrying out their inspection duties. The Swedish and Swiss members have complained officially about this interference

*Reprinted from St. Louis Post-Dispatch, June 21, 1954.

a number of times. The only result was the placing of similar complaints by the Polish and Czech members that they had been hampered in their duties in South Korea.

The fact is, of course, that every facility has been provided in South Korea while every obstacle has been placed in the way of inspection in North Korea. As far as the inspection teams are concerned the Chinese could have doubled their forces without the inspectors' knowledge.

It appears, though, that the difficulties placed in the way of the inspection teams have been due more to the suspicion that dominates every Communist state, rather than an effort to conceal increases in forces or equipment.

Both sides have an effective espionage system, since this is easy in a divided country. Gen. Taylor has stated that he could not definitely accuse the Chinese of any extensive violation of the armistice terms.

One result of the Communist refusal to allow the inspectors to perform their duties, while they can operate in South Korea, is that the Communists have built up a large dossier of alleged violations by the United Nations while the U.N. Command has next to nothing in the official record against the Reds. In case of resumption of the conflict this dossier could be used to exculpate a new Communist aggression.

Rhee a Dangerous Element

The 79-year-old president of the Republic of Korea, Rhee, is himself the most intransigent and dangerous element in the situation. Rhee sees North Korea and Korean unity forever lost if Chinese colonization is allowed to continue.

He is willing to fight and wants to fight. Our military and diplomatic officials have assured him in most solemn terms that he would not be supported by the United States in an aggression against North Korea.

Rhee does not believe them. He has his own American advisers who assure him that however little the United States might like it, we would have to support him if a war were started.

Either side could create incidents that could reopen the conflict. There is always this danger, but the most serious threat of restarting the war comes from the South Korean side.

The real restraint on Rhee comes from his own military men. Our officers have convinced most senior Korean officers that they could get nowhere against the massive Chinese defenses if they did start north.

There the matter stands. The peace will be uneasy as long as the irreconcilable old patriot, Syngman Rhee, lives.

The future of the negotiations at Geneva about Indochina cannot be foretold. The new French government may be willing to make enough sacrifices in Indochina to make a peace acceptable to the Reds. In this case the loss of all of Viet Nam is inevitable. Laos and Cambodia might be preserved, since there is no popular support for the Communists such as exists in Viet Nam.

A so-called "free Thailand" government has been set up in South China by the Communists and is an indication of Red intentions toward Thailand.

Asia Defense Talks Go On

The United States is proceeding with its talks to organize a Southeast Asia regional security pact somewhat similar to the North Atlantic Treaty Organization. This would mean that the United States would build bases, warehouses and lines of communication in Southeast Asia on the territory of member states, such as Thailand and Burma, or Laos and Cambodia, and send troops and aircraft to occupy and protect them.

Initially the forces would not be large, probably a division or two, and three or four air wings. Antiaircraft and supply and engineering personnel would require about 50,000 men additionally. The whole, even though not large, along with the forces of other members would make an important addition to the security of Southeast Asia. It also would insure that fresh aggression would be met by the combined power of the Western and Asiatic nations in the organization.

The proposal is valid. Its implementation ultimately would depend, however, on Asiatic manpower, trained and aided by the Western powers. The right balance of national forces would be one in which each contributes what it is best able to furnish. The Western powers on this principle would furnish air and naval power, armaments and military knowledge.

Initially there could be only a small

Asiatic military contribution, since the forces are not in existence. This means that the Western powers would have to send in ground forces, not necessarily in large numbers, but enough to make a military force that could not be overlooked.

If experience means anything, once our forces are established on these missions all over the world, they will stay there.

A Southeast Asia Treaty Organization, therefore, would create new military commitments at a time when a reduction is taking place in the armed forces of the United States and American military forces are strained to the utmost to maintain existing overseas forces.

The Army is the worst case. It has 11 divisions overseas and six in the United States. The Eighty-second Airborne Division is the only one in the States that is in readiness as a strategic reserve. Efforts are being made now to bring the Second Armored Division up to a suitable state of readiness. The other four divisions are little more than replacement centers for rotation to overseas units.

Career Personnel Quitting

It will be impossible to maintain two-thirds of the Army overseas for any length of time. The career personnel, faced with an indefinite stretch of frequent moves, long periods away from their families and with spending two-thirds of their time outside of the United States will quit—are quitting.

The same problem exists in the Air Force and Navy to a lesser degree.

If new commitments are made in Southeast Asia, if the forces now overseas cannot be withdrawn due to the dangers and tensions of the times, then the new commitment, in the opinion of many top officials in the Pentagon, should not be made without at the same time going before the Congress to provide for the increased forces that will be required.

As of today, the commitment is being planned but the military forces are not.

If no armistice is reached in Indochina, it is apparent that the new French premier will be willing to internationalize the war and will expect the United States to use atomic weapons.

The request for American and other nations' assistance can come very quickly, since Mendes-France has given himself

(Continued on page 11)

CAREER MANAGEMENT

SELECTION FOR SENIOR MILITARY SCHOOL

THIS article discusses the specific method by which Infantry, Artillery and Armor officers are selected for attendance at the Command and General Staff College and other high level military schools.

Less than fifty per cent of combat arms officers can be accommodated at the Command and General Staff College and of those who graduate from this school, less than half can expect to attend top military colleges. This means that many able officers will not be able to receive such schooling, but it assuredly does not limit the mental or practical development of such officers. It has been proved again and again that selection criteria has never been perfect. Officers should not get unduly discouraged or unhappy over failure to be selected to attend one of our top schools. A great many general officers of World War II were not among those who had the advantage of privileged school training.

► In the selection an officer is required to compete only with his contemporaries. Officers are divided into Basic Year Groups. Reserve officers are also segregated into year groups.

► The individual's record speaks for itself as regards broadness of his experience and manner of performance. It is assumed that all officers want to attend these schools so all records are considered regardless of whether or not applications or special recommendations are received.

► Fair, unbiased, consistent consideration is given each officer.

► Selection is supervised by the chief of staff of the Army and his top level assistants.

Actual selection in the branches is made with consideration for the following:

1. Command duty.
2. Staff duty.
3. Instructor duty (includes civilian component and certain MAAG and mission assignments).
4. Combat experience.
5. Troop experience (branch qualification).

6. Overall Efficiency Index.

In recognition of the fact that declared specialists are at some disadvantage with regard to such factors as command and troop duty, provisions exist for comparison of specialists among themselves.

A small portion of the quotas for Army War College and Regular Command and Staff Officers Courses are designated for Reserve Officers.

Normally three times the number of officers needed to fill a school quota are tentatively selected. Such selections are based upon the order of merit derived from scores obtained from the weighted factors, with modified evaluation for some unusual achievement. The selections are then arranged in order of merit.

ASSIGNMENT OF AIRBORNE OFFICERS

Requirements for airborne officers have existed since the parachute test unit made their first jumps in August, 1940. Although there are approximately 7900 airborne officers on active duty, they are not always available to fill some 2400 airborne requirements. Career Management branches sometimes experience a little difficulty in filling a requirement, due to non-availability. For example, there are approximately 1000 airborne Artillery officers on active duty to fill an authorization for some 500 officers; yet a shortage exists in our airborne units for Artillery officers. There has been a constant need for volunteers in our Special Forces Units (Airborne). These Special Forces Units are specially organized, trained and equipped to conduct operations within or behind enemy lines for military purposes.

One advantage of being airborne qualified is that such qualification provides a greater opportunity for varied assignments. Being an airborne officer could increase your chances of getting troop duty. Likewise, officers with airborne experience are in continuous demand for staff duty in the Pentagon, in the XVIII Airborne Corps, 11th and 82d Airborne Divisions, 508th Airborne RCT, and elsewhere on important

The next step in selection is for each branch list to be reviewed by the branch chief, after which the recommended order of merit is submitted to Chief, Career Management Division for approval. Once the lists are approved, the availability of individuals must be determined.

Final approval of lists of officers to attend a given course is made by Chief, Career Management Division, TAGO, for Command and General Staff College and Armed Forces Staff College level courses; and by the Army Chief of Staff for War College level courses.

The ultimate objective of the entire system is to select for further schooling those officers most likely in time of national emergency to provide the top leadership in the Army.

boards and staffs, and as airborne instructors in service schools.

Officers normally are selected for airborne unit training only if available for assignment to airborne duty following such training. The assignment is made then to permit qualification as an experienced airborne officer—one who has served a minimum of one year in an airborne organization, unit or staff, and has participated in the planning, preparation and execution of an airborne operation, field exercise, or maneuver. In order to insure that newly qualified airborne officer will receive adequate unit training, Career Management Division has permitted lieutenants to serve at least nine months with an airborne unit, and all other grades have been permitted to serve at least one year prior to reassignment.

Each airborne officer is identified as such by prefixing a "7" to his MOS, and retaining the prefix to his primary MOS as long as he remains qualified for airborne duty, irrespective of duty assignment. This MOS prefix is removed if the officer becomes physically disqualified, or if he requests removal from airborne duty through command channels to his career branch, stating his reason or reasons for such a request.

The needs of the service, the officer's qualifications, and when possible his individual preferences are the factors which regulate the assignment processes. Officers desiring airborne assignment should so indicate on their annual pref-

erence cards. Airborne officers are utilized in non-airborne assignments when their services are required, and career-wise to gain the broadening experience necessary for a balanced military background.

Only personnel selected for assignment to a Mission or MAAG in Central or South America must possess proficiency in the language of the host country. Those selected who are not language qualified are sent to the Army Language School, Presidio of Monterey, California, for a 23 week course in Spanish or Portuguese prior to assignment to the overseas agency.

DUTY WITH UNITED STATES MILITARY MISSIONS AND MAAG'S

ONE of the most satisfying yet challenging duties is an assignment with one of the many United States Military Missions and Military Assistance Advisory Groups (MAAG's) scattered throughout the four corners of the world. Mission and MAAG personnel are in almost daily contact with the leaders of the government, diplomatic corps, and armed forces at the highest level of the country in which serving. Understandably officers selected for such assignment, and for that matter their families as well, must meet the most exacting and highest standards of professional attainments and social acceptance. In return for hard work and in some cases personal inconvenience there are many personal advantages that should be weighed carefully by officers when considering this type of duty; but more of that later. By way of introduction let us review the location and purposes of our far-flung Missions and MAAG's.

United States Army personnel serve with Military Missions and/or MAAG's located in the following countries:

Belgium	Indo-China
Brazil	Iran
Bolivia	Italy
Chile	Liberia
Colombia	Netherlands
Costa Rica	Nicaragua
Cuba	Norway
Denmark	Panama
Ecuador	Paraguay
El Salvador	Peru
England	Philippines
Ethiopia	Portugal
Formosa	Saudi-Arabia
France	Spain
Greece	Thailand
Guatemala	Turkey
Honduras	Venezuela
Yugoslavia	

Generally, the purpose of these organizations is to cooperate with the host governments with a view toward enhancing the efficiency of their armed

forces. Specifically, the purpose of the Military Mission is to aid in the training. The purpose of the MAAG, on the other hand, is to administer the military assistance to the host country under the Mutual Security Program. This military assistance is in the form of military equipment, materials and services, which include technical and training assistance. In many of these countries United States Air Force and Navy personnel are also assigned for the same purposes.

Each of the Missions and MAAG's is a team and positions are established which will best provide the desired assistance for the host government. Many of the teams are composed of personnel from all branches of the service who provide inspiration, guidance and knowledge in their particular qualifications.

In meeting the officer personnel requirements of the Missions and MAAG's, the Career Management Division must consider them along with their other overseas requirements and assign qualified officers who are available for an overseas assignment. Selected officers require the personality, tact and judgment to represent the Armed Forces and the United States in a foreign country and they must have sufficient remaining service to complete the prescribed overseas tour. In some instances they must be further nominated to the Mission or MAAG or presented to the host government for acceptance. Normally requirements are received and selections made three to five months in advance of the reporting date—or even a year if the officer has to learn the language.

Officers interested should refer to SR 600-175-5, dated 12 February 1951, which outlines the basic qualifications required for selection. Qualified officers may indicate their desires on the Officer's Preference Card, or they may volunteer for such foreign service at any time prior to receipt of overseas orders by making application under the provisions of AR 600-175.

On these assignments, authority for travel of dependents varies with local conditions in the host countries. At the present time families may accompany officers assigned to Missions or MAAG's located in: Turkey, Greece, Portugal, Norway, Netherlands, Ethiopia, Italy; France, Denmark, England, Belgium, Liberia, and all countries of Central and South America. Travel of dependents to the remaining countries, where Missions and MAAG's are located, is accomplished only with the specific approval of the Chiefs of the agencies. The tours vary from one to three years.

To aid in preparing for one of these assignments, each officer selected receives a brochure written by the members of the Mission or MAAG from their actual experiences. These brochures include information covering all manner of things from how and what to pack to the price of corn flakes on the local market.

From a career standpoint, assignment to a Military Mission or MAAG may well be advantageous. All positions require ingenuity and ability. Some are for instructors and as such are similar to assignments on the staff and faculty of a service school. Other positions may be as advisors to unit commanders, or as administrative officers.

New Crises Threaten

(Continued from page 9)

only a month to negotiate a peace. It may come in the face of a serious emergency with the Reds threatening Hanoi to help along the negotiations as they did Dien Bien Phu.

Again no decision has been made by the United States as to what to do in this eventuality. If a decision to intervene had been made under conditions that made it seem likely, Pentagon officials believe that at the same time the Administration should have reversed the reduction in the military establishment and asked the Congress for necessary increases.

ELECTRONICS AND MEN

By LT. COL. LEONARD M. ORMAN

IN the May-June JOURNAL article entitled *Electronics Design* we posed the questions "Do we have too much electronics in the Army today? Can we maintain it?" Let's now give some consideration to the men behind the equipment, the operators and maintenance men.

We must base our planning on the two-year soldier. For the foreseeable future the majority of our army will be composed of the two-year draftees, whether we like it or not. Consider our present radar maintenance school of nine months duration. Add to this basic training, leave and pipeline time and you'll find that most of the men reporting for duty as radar maintenance men have about seven months to work before they again don mufti. Don't forget that these men are green as grass when they report. The only practical work that they've had is in the laboratories under the eagle eye of an instructor. Usually that work has been done in small groups. Obviously these men aren't much good until they have several months of practical experience on the set itself. What's the answer? There just isn't more time available. Even the most efficient administration of a soldier's time wouldn't increase the available duty time more than a couple of months. Electronics equipment is getting more complex all the time. Can we possibly decrease the course? Yes, I say we can and we must.

The Electronics Course

We can cut the length of the course by two methods—by a change in approach and by greater specialization.

The Approach

We are trying to teach a man too much. Having taught electricity and electronics at the Military Academy for three years I know that some of our

present radar maintenance course is on a level with undergraduate engineering. Yet our maintenance men in the artillery don't need to know an electron from a capacitor. Let's adopt the pragmatic approach of the Technical Institute. There the application to practical problems is shown rather than how formulas are derived. A technical institute is terminal in its nature. It fits its graduates specifically for engineering work whether this be operation or maintenance, or building or testing. Some even go into elementary design. The Institute does not pretend to train a man for research or development work. When it is considered that industry requires about five technicians for every engineer, the need is seen for the pure technician. For example the Raytheon Manufacturing Co. has 20,000 employees. Of the 1,500 engineers only 46 per cent have B.S. degrees and only 11 per cent have graduate degrees.

Specialization

This is now getting to be a nasty word in some military vocabularies. But since we've offended already, let's take the bit in our teeth and trample on this sacred cow some more. We've got to specialize more. In addition to lowering our sights on the level that we teach as suggested above we must also on the amount that we expect a man to learn. This will create additional problems for the G1 in distribution of men but show me a better solution. Teach a man a single piece of equipment, drop the frills from the course, the "general subjects," and make of this man one thing, a trouble shooter on a single item of equipment. Don't try to make him learn more than one item. If you do, then he will know no single one well. If necessary divide a complex system into several parts; e.g. the acquisition radar of the AAFCS M33, as distinct from the fire control radars. The theory that if a man knows one radar he can learn another in a hurry is hog wash. This has been proved by the initial poor state of maintenance in the field of Radar Set AN/TPS-1D. So far there has been no

course of maintenance on the Topsy. It was tacked on to the end of the AAFCS M33 course. An enlisted man got two weeks on the Topsy, and an officer, three or four days. This permitted no practical work whatsoever. Put yourself in the place of these men. You had a nine months course with two weeks on the Topsy; chances were only one in five in a battalion of being assigned to one. So what did you care about the Topsy. Field results of the past two years showed the results. Although this was not the only factor, results achieved in the field were less than one-half of those achieved in the Board service test of this set. Topsy needs a man who knows this set to maintain it. An "L" band set is a different animal from an "X" band. So I repeat, it's pure hog wash to say that if a man knows one radar set he can repair any. He may in time, but not in the soldier's first two years service.

So, I strongly recommend a greater specialization in the electronic courses for the two-year men. This is not, of course, the only solution. One other solution is to devote greater effort toward training junior maintenance men in the battalions by conducting practical schools along with the work. Still another solution is to require reenlistment for at least three years for the regular electronic courses. But the present scheme is not satisfactory.

Margin For Error

I would adopt one safety factor. I would continue to give some selected regular army men longer courses. Granted that most troubles are simple tube changes, some others require more comprehensive analysis. Here your maintenance man, senior grade, would come into the picture. Ordinarily, your junior grade maintenance man could get the set back on the air but when he's stuck then call for help. What has been previously said about *aspect* and specialization still applies even to the senior grade maintenance man. Don't make a long-hair out of him. Don't try to teach him too many types of equipment.

Lieut. Colonel Orman, Member of AFF Board No. 4 and a regular contributor to these columns, has been transferred recently to the Ordnance Corps with station at Aberdeen Proving Grounds, Maryland. We expect to continue featuring his articles.

Help

Two important aids should be given all maintenance men. These are:

1. Equipment designed for the maintenance man.
2. The Trouble Shooter's Bible.

By the first of these is meant more metering of circuits, unitized components, more check points and similar devices. These aids were discussed at length in the article *Electronics Design*.

Have you watched a TV repairman at work? Most use a trouble shooter's guide with lots of pictures. If you get this type of trouble, look at such and such. The SCR-584 and some Navy equipment are easier to maintain than newer gear in part because we have well documented guides. These should be developed as soon as possible on newer equipment. There is room for a good deal of improvement in older ones. More pictures. More indexing. More cross-indexing.

Electronics Officer Career

We also need to do a lot to make a more attractive career for our electronics officers. The army has been exceedingly liberal in providing top flight electronic training for selected officers both in the universities and in Army and industrial installations. However, the program sags for the officer in his advancing years.

After the big to-do about getting radar officers early in World War II most of us remember well how the radar officers lost out later in the War when there were few slots for field grade radar officers and at the same time the commanders would not let the radar officer change his MOS to take command or a higher

ranking staff assignment.

Then, since the war we got fresh encouragement again when the career management people began offering many AAA officers master's degree courses in electronics and advertising that "the military careers will not be jeopardized by taking these courses and following these lines of work." And, of course, in some respects this has worked out as promised. The technical specialists have fared well in assignments to R & D Boards, to Schools, and on special assignments to industry and the services.

However, the general situation is already clearing up to show that the specialist in our own branch is losing out. The career management people make it only too clear to us now that broad experience in command and various staff jobs is the factor that counts heavily toward selection for advanced army schools and choice assignments to the general staff. And those assignments, in turn, are required for promotion to the top grades.

As I observe my own classmates from West Point I note that those who were promoted ahead, those who are getting ahead in the army advanced school program, those who are getting well lined up to go to the top are without exception troop leaders. Those with the master's degrees, or the Ph.D's., and those in research and development are being left behind.

And as if that isn't enough, the recent Womble report recommends that more emphasis be placed on leadership and less on "technical astuteness." The artillery should take strenuous objection to this. We are moving forward in the

field of new weapons with new capabilities, made practicable by the latest and continuing scientific development. We expect to man those weapons ourselves and not to rely on hiring someone else to do it. We need more specialists and all the technical astuteness we can develop.

Leadership can be and is being demonstrated in technical fields. The man who has the education, the foresight, the judgment and courage to develop and make the decision to provide effective equipment for our troops has to be a leader. Indeed his responsibilities are just as keen as those on the battlefield. And indeed the time has come in the Antiaircraft Artillery when technical proficiency is an essential to leadership.

Obviously we need to develop a broad viewpoint among our electronic officers. They need to be Army officers as well as specialists. They need to understand the problems of the combined arms. At the same time scientific development in electronics is moving fast and the specialist has to keep up the touch. The officer specialist can do other tours of duty to get breadth of view, but there is a limit in how far or how long he can afford to get out of the main stream.

Obviously, too, scientific development will continue at a fast pace in the anti-aircraft and guided missile fields. For first class weapons we need first class officers to guide in their development and employment. We must and no doubt we shall shape our career system to give the electronics specialist a full challenge to his ability and a full chance to go to the top in his profession.

BOOKS

PARATROOPER. New Book by Lt. Col. Francis X. Bradley, Military Assistant to Secretary Stevens, and Lt. Col. H. Glen Wood, Paratroop Battalion Commander in the 82nd Airborne Division. Foreword by General Ridgway	\$3.50
FROM THE DANUBE TO THE YALU. By General Mark Clark	\$5.00
KESSELRING: A SOLDIER'S RECORD. By Albert Kesselring	\$5.00
U. S. GRANT AND THE AMERICAN MILITARY TRADITION. By Bruce Catton	\$3.00
I FLEW FOR THE FUEHRER. By Heinz Knoke	\$3.00
ARMY WIFE. By Nancy Shea	\$3.50
BATTERY DUTIES. By Colonel Cocklin and Major Boatner	\$2.50
GUIDED MISSILE PAMPHLET	\$1.00

ORDER FROM THE ANTI-AIRCRAFT JOURNAL

631 Pennsylvania Ave., N.W.

WASHINGTON 4, D. C.

Hermann Göring Answers the \$64 Question

By **BRIGADIER GENERAL WILLIAM W. QUINN**

Joint United States Military Aid Group to Greece

REICHSMARSHAL HERMANN GÖRING is dead—and probably forgotten by many. I have not forgotten him, however, nor have I forgotten that day in May 1945 when he astounded some very important people with his keen intellect and his unusual analysis of the Nazi defeat.

Göring had surrendered to our forces earlier in the month and was being questioned by some officers in the United States Seventh Army. General Carl Spaatz, who then commanded the American air forces in Europe, on learning of Göring's status, requested us to fly him to London for interrogation.

Lieutenant General Alexander M. Patch, the Seventh Army Commander, replied that he was not through with Göring at the moment, but that if General Spaatz wanted to talk to him at Seventh Army Headquarters, he would make Göring available. Later, General Spaatz, accompanied by General Hoyt S. Vandenberg, certain of his staff and a few civilian technicians, flew to Augsburg, Germany, about the middle of May 1945. On arrival, his party was joined by General Patch and myself and all of us proceeded to the prisoner of war compound where Göring was incarcerated.

We moved into a rather new and modern school building which served as the headquarters for the enclosure. We went upstairs to what had been the principal's office, which was very well lighted and furnished with relatively new, modernistic furniture. We all took seats in a semicircle in front of an enormous black desk which was bare except for a small, revolving globe of the world.

I had told the Reichsmarshal of the impending visit of General Spaatz. He seemed delighted and, I believe, a little flattered that General Spaatz was interested in talking with him. He told me he would enjoy the visit as he was sure they had a lot in common.

It was interesting to watch Göring when he was ushered in and seated behind the big desk. One could assume that the maker of the desk must have had Göring in mind when he built it, for they went together like a picture and its frame. Göring bowed slightly in greeting and, upon the interpreter's instructions, sat down at the desk.

He wore his favorite blue-gray uniform with heavy gold braid trimmings but without ribbons or medals.

Before the conversation began, Göring made a short salutatory statement to General Spaatz, saying that he was extremely glad to be able to see and to talk with General Spaatz personally as he held him in great esteem as an airman. However, he added that he wished the circumstances were just a little different and that he were not the vanquished. General Spaatz smiled at this and the conversations began.

General Spaatz started with questions about the Battle of Britain, the technique and tactics of the air fight over the British Isles, that is, Luftwaffe offensive tactics and the allied defensive mechanisms. By Göring's dissertation on this comprehensive subject, it soon became apparent to the entire party that his technical knowledge regarding aerodynamics, meteorology, and jet propulsion was amazing. Not only was he a strategist, but he had a tremendous amount of basic knowledge of aircraft and the techniques involved in their employment; so much so that General Spaatz on several occasions turned to his advisors and looked at them quizzically.

Without exception they nodded back affirmatively, indicating that they agreed with the particular observation or the statement involved.

Göring also gave quite a discourse on the B-25 and its role in the allied air counteroffensive. He admitted that he was completely fooled and surprised by its extensive use. He went on to say that it was not the existence of the B-25 that came as a surprise, but the fact that he had grossly underestimated the industrial potential of the United States to produce it in such numbers and to introduce it in combat with such speed and devastating effect.

The 64-Dollar Question

This conversation continued for some time until finally General Spaatz said, "Now, Reichsmarshal, I am going to ask you what we call in America the '64-dollar question.' I want to ask you: Could we have defeated Germany by strategic bombardment alone and don't you consider, from an airman's point of view, that the Normandy invasion was unnecessary?"

I remember the knowing smile that flashed across Göring's face when he answered, quite dramatically, "Nein!" (No!) I also remember General Patch's chuckle when he turned to General Spaatz and said, "Tooey, you asked for it and you sure got it."

General Spaatz countered with another question: "If you do not believe that we could have defeated you by strategic air and that we had to invade the Continent, will you please explain to me your reasoning?"

Göring slowly rose from the chair as the principal might have done when posed with a tough question from one of his students. He glanced out of the window and turned slowly back to General Spaatz. As he gave the globe a slow turn with his finger, he answered, "I'll try."

I'll try to show you precisely those reasons, he continued. First you must understand that in the history of warfare there has never yet been an offensive weapon that has not been countered by

General Quinn served during World War II as G2, IV Army Corps, and later with Hq. Seventh Army, from the invasion of Southern France to the end of the War. Having served in Korea as G2 of the X Army Corps in the Inchon Landing and later as commander of the 17th Infantry, 7th Division, he is now serving as Chief of JUSMAG in Greece.

a defensive one. Swords developed the shield; the submarine developed the destroyer; the bomber the interceptor; and so forth. Of course, offensive weapons destroy when the defensive ones are absent, but my premise is that defensive weapons or techniques have kept only a short step behind offensive weapons. Naturally, such evolution is based on a standpoint of sheer military necessity.

For example, when the B-25, and then later Lancasters and B-17s, were giving us a going-over, we began to go underground. I might interject at this point, that if we had started at the outset to go underground, your B-25s would not have hurt us seriously nor would have your heavy bombers. However, we made great progress in our passive defense program, particularly with our industrial tools, other critical and strategic products and supplies, as well as the jet. And I tell you this, Herr General, if we had had one more year, at the rate at which we were rapidly building our jets under shelter and unmolested by your strategic aircraft, we would have driven you from the air. And since your people have captured and inspected our jets, I am sure

you can have little doubt.

Consequently, if there had been no invasion, if the allied infantry had not stormed the beaches of Normandy when it did, we would not have been defeated from the west. There would have been no decision in the west.

Now the reason that the invasion led to our defeat was the fact that it caused the clock to run twice as fast from a standpoint of time available to us. In other words, when the invasion came, our position became doubly worse, for besides the running out of time, we were now confronted with loss of space.

You see, we began to lose ground when we were unable to eject you from Normandy. The main reason was General Vandenberg's Ninth Air Force, I might add. This support was mainly responsible for the fact, and I believe Field Marshal von Rundstedt agrees with me, that we could not shift our reserves to the beaches in time to throw you back into the sea. However, that was a part of the invasion. Yours was a concentrated air effort, in that it was completely localized and thereby you employed en masse the great power that you had. But

that is beside the point. My point is that when we lost ground and continued to lose ground, there was entailed a loss of subsidiary plants, small-parts factories, civilian labor, and small component construction. Either they became a loss or had to be displaced further east. When this displacement took place, there was a simultaneous interruption in production in some particular item. A great number of these factories were dispersed throughout France and their loss retarded our jet production.

We lost so much ground that eventually we had to take men out of the plants, put rifles in their hands and dispatch them to your front to try to hold back the tide—to save this space and gain more time. And as we lost the men in the plants, our production decreased, so that our dispatch of a jet for combat was progressively becoming less frequent.

Finally we came to the point where the production returns diminished to zero. We were overrun. We lost the war. So in answer to your American "64-dollar question," Herr General, had you not invaded when you did, we would not be having this conversation today.

Security Control in the Soviet Army

By LIEUTENANT BENSON LEE GRAYSON

THE Government of the Soviet Union is dedicated to the establishment of Communist Dictatorships in every nation on the surface of the earth. Since other nations are unwilling to accept slavery, the Soviets have succeeded in imposing Communist Governments only when they have employed force, or the threat of force, to achieve their aims. Their reliance upon military force has caused the Soviet leaders to keep the army, and in fact the entire country, in a constant state of mobilization for war.

Thus, in a nation where the great majority of the population would welcome a relaxation in state control, the Soviet Government is forced to keep a large number of citizens under arms.

This raises the possibility of an armed rebellion against the Communist Dictatorship. The danger inherent in this situation is fully realized by the Soviet Government. Suspicious of even the slightest deviation from the party line in any field, the government employs the most ruthless measures to ensure the loyalty of the Soviet Army.

Security control of the Soviet Army is entrusted to two separate organizations, which operate independently of the ordinary military chain of command. The first consists of the political officers and the network of Communist Party and Komsomol (Young Communist League) members in the Soviet Army. It is charged with instilling the Russian sol-

dier with Communist propaganda. The second organization is assigned the mission of discovery and liquidation of any disloyal elements in the Soviet Army. It consists of units of the MVD secret police.

The Main Political Administration is the organization in charge of all political and educational activities in the Soviet Army. It functions as both a part of the USSR Ministry of Defense, and as the Military Department of the Central Committee of the Communist Party. In every Russian unit down to the battalion level, there is a representative of the Main Political Administration who serves as Deputy Commander for political affairs (Zampolit). There is also a political

leader in every company, the Politruk. For a time, the position of company political leader was abolished, but in 1949 it was re-introduced, and the program of political indoctrination of the soldiers was intensified.

The practice of having a representative of the Communist Party in each army unit was begun by Trotsky during the Russian Civil War. This representative, known as the Political Commissar, was given equal authority with the unit commander and had to countersign all orders. However, Soviet Army officers continually complained that the system of joint command undermined discipline and caused unnecessary confusion in battle. As a result, the Political Commissar was replaced in 1942 by the Zampolit.

Although not as powerful as the former Commissar, the political officer has great authority. He is responsible for all propaganda and educational activities in the Soviet Army, and supervises Komsomol and Communist Party affairs in his unit. The political officer prepares the unit newspaper, presides over club meetings and censors the soldier's mail. The few leaves permitted the Russian soldier are granted at the discretion of the Zampolit.

IN order to ensure the absolute loyalty of the Soviet Army to the Communist Government, the political officer is required to forward periodic reports on both officers and enlisted men of his unit to the Main Political Administration. This system leads to a great amount of friction between the regular officers and the Zampolit. Because the promotion of officers depends on their loyalty to the regime, the reports of the political officer are carefully surveyed. The commanding officer of a unit is placed in the awkward situation of being in the power of the political officer, who is theoretically his subordinate.

Minor breaches in discipline, for example, the breaking of the non-fraternization rule in Germany, are punished by the Zampolit. More serious offenses, and any case containing even the slightest trace of disloyalty, are turned over to the MVD. The political indoctrination of the Russian soldier begins with his induction into the army. Upon arriving at a training center, the recruits are divided into groups of from twenty-five

to thirty and placed under the control of a political worker. The political worker lives with the recruits, examines their mail, and attempts to lead them into discussions in order to discover their political opinions.

Following basic training, the new soldiers receive further indoctrination in the company. Lectures are given on the glory of Communism, the current party line, and the danger of foreign espionage. In the past, Stalin's *Short History of Russia* was a required text at the biweekly political classes. Russian soldiers who have escaped, complain that the frequent political lectures left no time for relaxation. One fugitive estimated that not more than ten per cent of the personnel took the political indoctrination seriously.

THE political indoctrination of the Soviet Officer Corps is stressed. The officers are also required to attend lectures on the glories of Communism, and are expected to have a thorough knowledge of the fine points of Marxist-Leninist theory. They are subjected to frequent examinations to test their progress. Lenin's collected works are required reading for all officers.

In spreading Communist propaganda throughout the army, the political officers are assisted by the network of Komsomol and Communist Party organizations in the armed forces. Army Komsomols are directed by the Komsomol section of the Main Political Administration, which must approve the leader chosen to head the Komsomol group. Primary Komsomol organizations are found at the company level, and are expected to educate the Russian soldiers in Communist theory.

Communist Party groups in the army are directly responsible to the Central Committee of the Communist Party. Secretaries of Party groups down to the regimental level are freed from all military duty so that they can devote all their time to Party work. The Secretary of the regimental Party organization directs the activities of all Party members in the regiment. The basic unit of the Party, the cell of from three to five members, is found in each of the twelve companies in the regiment. The chief of the cell is responsible for inducing the best of the non-party men to apply to join the Communist Party. Komsomol and Communist Party members are expected to

inspire their fellow soldiers with loyalty to the state, by propaganda work and by setting a good example.

In order to preserve the quality of Komsomol and Party organizations, soldiers showing leadership potential are urged to join. During the Second World War, heroes were sometimes forced to join the Communist Party so that the Government could claim that all Russian war heroes were also firm supporters of the Communist Government. Usually, soldiers are eager to join the Party cells since membership in them facilitates promotion. In fact, Party membership is a virtual necessity for promotion of an officer above company level, and it is estimated that eighty-six per cent of the Soviet officer corps are Communists or Komsomols. However, Party membership requires the soldier to evidence exemplary conduct, and any breach of discipline by a Party member is punished with greater severity than would otherwise be the case.

Party members in the army who show skill in spreading Communist propaganda and indoctrinating the troops are sent to school to be trained as political officers. These schools are operated by the Main Political Administration, which also maintains the Lenin Military Political Academy in Moscow, for the training of senior political officers.

The political officer's duty is largely a matter of instilling the troops with Communist propaganda so that they will not be led into any activities against the state. One of his duties, however, is more nearly related to the punitive functions generally assigned to the MVD. The political officer co-operates with the MVD in maintaining a network of spies and informers at all levels of the army. These informers are recruited by the political officer, and are blackmailed by him because of minor offenses they have committed. They are forced to act as spies among their fellow soldiers, and report any suspicious conversations or other indications of anti-Soviet feeling. These informers do not report their findings to the political officer, but to the MVD.

THE MVD or Ministry of Internal Affairs controls the police and terror apparatus of the Soviet state. It penetrates into every aspect of Soviet society, and

is responsible for the discovery and liquidation of any element suspected of disloyalty to the Government. Since the loyalty of the Soviet Army is absolutely essential to the Government, there is a "Special Section" of the MVD which is solely concerned with the security of the armed forces. MVD detachments are assigned to all military formations down to the level of the battalion. The Special Sections receive the reports of the informers recruited by the political officers. The MVD organization has a chain of command independent of both the regular military, and the Main Political Administration control.

The MVD maintains dossiers on every officer, political officer and Communist Party member, as well as on those enlisted men that are brought to their attention. Promotions are not granted without a security check by the MVD. The MVD encourages informers to denounce even the most loyal supporters of the government, so that in the event it is decided to remove an individual for any reason, sufficient "evidence" is always ready in the dossier.

The MVD has no difficulty in obtaining recruits, since it is regarded as an elite service and given special privileges. Junior MVD officers frequently dominate regular officers, nominally their superior. During the Second World War, MVD units were employed to prevent withdrawals. After the disastrous retreats in the first months of the German offensive, MVD units were stationed behind the Soviet lines, with orders to shoot anyone proceeding towards the rear without written permission.

At the end of the war, the MVD regarded the partisans as subversive elements because they had escaped the usual indoctrination given the regular units. The partisans were, members of the Soviet Army who fought behind German lines, conducting guerrilla activity. Originally they had been formed by units or individuals cut off in the rapid Russian retreat. The MVD put all such individuals into storm battalions, to be used in suicidal attacks. Those who survived, and they were very few, were then placed in a special unit to be re-indoctrinated in Communist ideology.

THE MVD is as concerned with the reliability of high ranking officers as of

subordinates. Entry into any Soviet Military School is determined largely on the basis of political dependability. An officer who attended the Frunze Academy, the highest Soviet staff college, reported that the MVD used attractive women agents to approach the students and attempt to discover their secret political opinions.

The MVD apparatus is not essentially a secret police in that its reputation for terror is advertised among the Russian people to instill fear and obedience in them. There is however, one agency of the MVD that operates in utmost secrecy, the army counter-intelligence or Smersh (an abbreviation of two words meaning death to spies). In 1943, Smersh was separated from the MVD and made into a separate Ministry, the MGB or Ministry of State Security, but following the death of Stalin it was reunited with the MVD. It is believed that the main functions of Smersh are to supervise the activities of the MVD in order to prevent any disloyal elements from infiltrating into that agency, as well as to prevent foreign espionage in general.

In its effort to carry out world revolution, the Soviet Union has been handicapped by the fact that a large number of the Russian people themselves oppose Communism. In an attempt to control the population and eliminate any possible opposition within Russia, the Soviet Government has resorted to terror. Because of the vital role assigned the Soviet Army in the planned expansion of the Soviet Union, the loyalty of the army is absolutely essential. To ensure this loyalty, the Soviet Government has resorted to measures which would be rejected by any but the most degenerate of states.

In the Soviet Army, the political officers attempt to indoctrinate the soldiers and spy upon the unit commanders. The MVD spies upon the political officers, and is in turn spied upon by Smersh. As a result, discipline is enforced by terror, and overall military efficiency is reduced.

The important question for the future of the United States is: will the Soviet security methods succeed in eliminating the opposition within the army? It seems to the author that the answer is no. If after more than three decades of Soviet rule, the Soviet Government is still unable to convince the Russian people that Communism is the ideal way of life,

obviously it will be a very long time before they will become convinced. Furthermore, the very methods the Soviet security agencies use to eliminate opposition in turn provoke more resistance.

From a survey of the security controls in the Soviet Army, it is possible to draw one important conclusion. The monolithic surface of the Soviet State conceals much inner opposition to the regime. These cracks in Soviet solidarity are vital weaknesses, and in time of war, they can be exploited by a clever and resourceful enemy to bring about the destruction of the Communist Government.

Later Comment

I am in complete agreement with your comment that the Communists are generally more aggressive than is our side. I believe that this is due to the indoctrination the Communists receive. The Soviet soldiers, and I assume the Chinese Communists also, are taught that Communism will eventually triumph. Part of their political indoctrination include Stalin's *Foundations of Leninism*, which states that everything must be subordinated to the basic policy of world revolution. It is explained that the Soviet Union is in danger so long as a single capitalist state survives. This continual indoctrination convinces many of the people that Communism can not be stopped.

The United States and her allies, however, conduct no such indoctrination. Our planning is essentially defensive in character, we are concerned with containing the Soviet Union rather than forcing the Communists to retreat. Anyone understanding the basic ideology of Communism is able to understand the fallacies it is based upon. If our country undertook to explain the real meaning of Communism, it is quite likely that no more Americans would succumb to Communist brain-washing, since anyone equipped to compare the two ways of life cannot help but be convinced by our democratic system.

Of course, the above statements are merely my own personal opinions, and I do not presume to know all the facts in the case. Nevertheless, I should be more optimistic about the American chances for eventual defeat of Communism if we stopped retreating, and began to appreciate, and make others appreciate, the democratic way of life.

Major Bartlett and The Great God Thor

By **LIEUTENANT COLONEL EARLE MOUNTAIN**

Try this on your M33!

TRAINING tends to become stereotyped. Many instructors fail to use imagination in presenting subjects to the troops and the result is a disinterested class in which nothing is taught and nothing is learned. Even the dullest subject can be presented in some fashion to stir interest and compel class attention. It's not easy, but it can be done.

I recall an experience I had as a battery commander. It was just before we went to the range to do our second service practice. The first practice was pretty good, but I felt we could have done better and I gathered the section chiefs together in the mess hall for a round table discussion. This is one of my pet techniques, to get the key men together over some coffee, start a good discussion and then monitor it, keeping the talk going and in the area under discussion. I soon discovered that the "team" concept of a battery was not apparent in my outfit. The range section didn't have much confidence in the gun section and the gun section was vehement in its opinion of the range section. The argument reached its peak when a gun commander blurted out, "Look, we had the highest rate of fire possible and we would have had a terrific score if it wasn't for that blankity-blank pinball machine out there that fouled us up!" There was no doubt as to what he thought about the M33! I quickly called a truce and said that I would study the problem and have an answer in a day or so.

It was evident that mutual respect and confidence between the sections had to be developed. I decided to concentrate on the radar-computer team for the primary test. How to show the gun sections that the M33 was tops and was deserving of their confidence, that was the problem.

At this moment, thank my lucky star, I walked my old friend, Major Bartlett, of whom I have told you before. It wasn't long before I had unburdened myself to him and stated the problem.

"Here's my suggestion," said the major. "Let's get the radar team together

and invite the gun commanders to watch a demonstration that should thoroughly convince them, once and for all, that the so-called 'pinball machine' is worthy of their confidence."

"Sounds good," I replied, "but how do you propose to go about staging this demonstration?"

"If you would like, old man, I'll be glad to give you a hand and run the demonstration for you."

"OK, it's a deal," I said, "how about 1300 tomorrow afternoon? I'll get the men together, have the equipment warmed up, give you an introduction, and then you take over."

THE next day, on schedule, I assembled the required personnel in the radar van. It was sort of crowded, but we all squeezed in. After the preliminary introduction, Major Bartlett took over and gave his presentation.

"Gentlemen—let's first discuss what we are trying to do in AA gunnery. Our job is to deliver a projectile into space to reach a certain point at the same instant the target, either a hostile plane or a towed sleeve, arrives at the selected point. Over the years since World War I much study, research, and development have been made, resulting in the combination we have here, the FCS M33 and the 90mm gun. Within its capabilities, this combination is tops. The M33 can track any plane that the guns can engage. The computer can take the present position data from the radar and transform it into the pointing data required by the guns to get hits. The data transmission system can feed it to the guns and continually point them at the proper elevation and azimuth to hit the target the radar is tracking.

"Let us further examine the computer. I jump to the computer for this reason, it is the part of the system that takes the radar data, changes it, and sends it to the guns as firing data. My suggestion is that at some other time the gun com-

manders should come in and watch the radar crew pick up and track targets. Once they 'lock-on' there is no further action they can do. Then the guns should go into remote one at a time—I'm referring to the 'present position check,' and each gun crew can then readily see, by peering through the bore of their own gun, that the radar does track a target and that the gun does follow it.

"That leaves the computer element as the possible source of doubt. That doubt I hope to dispel today.

"The computer is an electronic gadget that solves firing table problems. We could sit down with pencil and paper and work out the firing azimuth and firing elevation for the guns but it would be too slow. So we have the computer that does it almost instantly. We have to have some base upon which to start. Our base is the firing tables. Neither you nor I are in any position, at the moment, to question their validity. Smarter brains than ours have developed and compiled them. We accept them. This means that when the firing tables say that for a certain altitude and horizontal range from the battery we must point the radar at such an elevation, crank in such a slant range, elevate the guns so much, and cut a fuze of so many fuze numbers—we must admit they know what they are talking about.

"The computer is made in accordance with the firing tables. You can easily check this. Here is an example. Zero out all parallax, zero out the wind speed, set the density at 100 per cent. Now, one question, what is the standard muzzle velocity of these guns?"

"2700 f/s," said one of the gun commanders.

"Right—now we will set the muzzle velocity dial at 2700.

"To show how the computer is built on the firing table, let us set in a simple problem. Elevate the radar to 655 mils, crank in the slant range to 10,000 yards, set radar azimuth at 3,950 mils. This is the pointing data for a point at 8,000

yards horizontal range and altitude of 6,000 yards.

"Now place the operation switch at *tracking test* and the input data switch at local position. Note that the firing elevation dial on the computer reads 655 mils, that the firing azimuth reads 3,950 mils. This is just a check on the data transmission from radar to computer. Now leave the *input* data switch on LOCAL and put the *operation* switch on FIRE FOR EFFECT. From the firing tables we read that the firing azimuth should be the original azimuth 3950, plus a correction for drift, or approximately 3946 mils, the firing elevation is 781 mils, the fuze is 20.08, and time of flight, 20.04 seconds. You notice that all our dials here do read these sums. Do you see now that the computer does solve the firing table problem?"

"One question, Major," said the computer operator. "I thought that the computer was built for an MV of 2,675 f/s, rather than 2,700. At any rate, when I work out my daily check problems, I have to set an MV of 2,675."

"This 2675 f/s muzzle velocity setting is for test problems only and is the midpoint between the upper and lower MV limits, that is; 2450 to 2900 f/s. In other words, it is the midpoint of the MV potentiometer in our computer.

"Now that we agree that the computer does solve firing table problems, let us go to the next step. Remember, the firing tables are based upon certain basic assumptions. Who knows them?"

The radar chief spoke up, "Well, that all conditions are normal. That is, density 100 per cent, no wind, air temperature of 59°, and the MV of the ammunition is 2,700 f/s."

"There's a couple more, Bill," said a gun commander, "Projectile weight of two squares and powder temperature of 70°."

"Very good, men, you've named them all. Because conditions are never normal; there is, for example, always some stray breeze floating around anyway, we have these dials on the computer to tell the little electrons inside that things are not exactly what they originally thought. The result is that, as we tell the computer what really exists, the machine quickly applies the necessary correction to the firing data to compensate for non-standard conditions.

"Now, if we knew our muzzle velocity,

if we knew our projectile weight, if we knew the powder temperature, and if we had a radiosonde met message, we would just crank in the met data, correct the MV for powder temperature, air temperature, and projectile weight, and open up fire at full rate. There would be no trial fire required. But, unfortunately, that is not always possible. More likely than not we will have to fire trial fire for one reason or another, either old met data or new ammunition or a combination of both."

"Hold it right there a minute, Major," said one of the gun sergeants. "The last time I was in AA we had the 584 and the M-9 computer. As I remember, it was a cinch to do trial fire. We fired, plotted the bursts, set in spot corrections, and away we go! But this gimmick, with all the twiddling of dials, is the craziest thing ever."

"You have touched on the big difference in the two systems of trial fire," replied Major Bartlett.

"First, let us take a quick look at the 'spot' method of applying corrections. It is valid only at the azimuth, altitude, and slant range at which the problem was fired. For example, suppose you fired at azimuth 2,400. Further, there was an initial mistake, we will assume, in setting in the wind azimuth. It was set as azimuth 800 mils. In other words, you told the computer it was blowing from left to right while in fact it was azimuth 4,000, or actually blowing right to left. Now you could correct for that by spot corrections for that particular azimuth you were firing at. But, if you had to engage at an azimuth of 5,600 mils, without benefit of additional trial fire, you would double your original error."

AT this point Major Bartlett made use of a grease pencil and drew a diagram on the plotting board to illustrate his point. Everyone agreed that the spot method was only good at the point at which the TSP was fired.

"Now let me illustrate what happens when the M-33 system is used. To present this problem I'm going to make a few assumptions. However, these will not in any way affect the basic principle of the M-33 trial fire theory. The general theory is to tell the radar where the bursts occurred. The radar is then moved to 'look' at the center of burst. Doing this

changes the firing data coming out of the computer. Since we do not move the guns, we have to make the firing dials read the original firing data. This is done by changing those dials representing non-standard elements until the original data again appears on the firing dials. Thus, we, in effect, make a new met message by moving the dials which represent met conditions. Or, by moving only the MV dial, we may arrive at a new muzzle velocity if we are sure of the met data used and are not positive about the initial muzzle velocity selected.

"Let us assume that a battery commander is about to do a trial fire problem. He has selected the following pointing data: Azimuth 3950, elevation 655 slant range of 10,000 yards. Like most of our units on-site, he hasn't much choice on selection of the TSP point because of dud and fragmentation areas. Now, let us assume that the great god Thor, sitting on a cloud in the sky, looks down at the battery, and, in his omniscience, is able to discern what the met conditions actually are at the moment the problem is fired. To make this particular problem possible for any unit to work out, let's zero out all parallax. Otherwise, if some other unit tries this, they wouldn't get the same answer.

"Let us now leave the battery commander, momentarily and ask the great god Thor what met conditions actually exist and let's set them into the computer. He tells us that the wind speed is 25 mph, the wind azimuth 3,600 mils, the density 103, and the air temperature, weight of the projectile and powder temperature are such that the battery should use a muzzle velocity of 2,680. Let us now read the firing data the battery *should* use. It is firing azimuth 3,942, firing elevation 785, fuze 21.04, and time of flight of 21.05.

"Thor, from his cloud, knows also, that when the target comes in, it won't be at the azimuth, elevation and slant range at which the battery commander fired his TSP.

"He knows that it will be engaged at radar pointing data of azimuth 2,350, radar elevation 645, and slant range 9,000. Note, now, this is a different azimuth, a different elevation, and a different slant range from that used in the TSP. Let us record what the battery firing data *should* be for this new point. It is firing elevation 753, firing azimuth

2357, fuze 17.58, and time of flight of 17.52.

"All this the great god Thor knows—but, unfortunately, he can't tell the battery commander.

"The battery commander sets up his original problem. Would you set up the radar pointing data, sergeant? It was azimuth 3,950, elevation 655, and slant range 10,000. Now let us put in what the battery commander *thought* was the correct conditions. Remember now, it is the best information he has from his met message which might be 2 hours old or, maybe someone goofed and made a mistake in taking it. But, he has no knowledge of the conditions aloft other than this message. So he sets in a wind speed of 30 mph, a wind azimuth of 3,000 mils, a density of 100 per cent, all from his met message.

"Let us assume that he does know the velocity of his on-site ammunition. This may or may not exist in the field but for the problem we will assume it. Let us also agree that the powder temperature he read is correct. That is something he can determine. We will assume then that the muzzle velocity he will set into the computer will be 2,680. Note that I haven't said anything about the possible error due to air temperature. If you study the table on the effect of air temperature you will see that even a 10° change will only make a difference of 3 f/s. We'll ignore that.

"Here is where you will have to go along with me a bit. It would be possible to sit down and figure out what the deviations in the sky would be because of this erroneous data. But we can accomplish the same demonstration and make the computer do the same work by changing the dials to read what the firing data *should* have been. This is like making the radar stand still and moving the guns to the burst.

"To make sure that you understand that there is no trick involved, I'm going to cover up all the computer dials except the firing data and time of flight dials."

HERE, Major Bartlett took a piece of electricians tape and completely covered the wind speed, wind azimuth, density, and muzzle velocity dials. At this point everyone was all attention, you may be sure. It was absolutely impossible to read any of the dials he had covered.

"Now, sergeant, you are the computer man, step up here and follow my directions.

"First, we must decide whether we will move muzzle velocity or density. Since we assume we know the MV and admit that the met message may be in error, pick the one that you know the least about and stick with it, in this case, density.

"Now, sergeant, turn the density dial until the time of flight dial reads 21.05. That's it. Now, turn the wind speed dial and bring in the elevation dial to read 785 mils. Notice that you have thrown the time of flight dial off. Re-adjust the density dial to bring the time of flight in about half the distance and try the wind velocity for the other half. That's right, continue to work one against the other until the time of flight and elevation are correct. Now, what affects azimuth?"

"Wind azimuth and speed, sir."

"That's right. Now move the wind azimuth knob to bring the firing azimuth to 3,942. Right. Now check the other firing data dials and, if they are off, re-adjust the wind velocity dial and the wind azimuth dials until all three firing data dials read correctly.

"Now about the fuze. My suggestion is to leave it alone. The fuze dial is tied in with the time of flight dial. For a particular time of flight there is a particular fuze. The machine is made that way. Fooling around with a fuze per cent spot is trying to take out the fuze running time errors and, in this case, you are just as liable as not to double the error as you are to correct it. My advice is—leave it alone!

"Now let us recap what we have done. We have fired a TSP. We have worked out a new met message, actually. We knowingly ignored the muzzle velocity dial because we already knew it. We can't improve upon it. We now have our dials reading the data the battery commander should have used. But, remember, we decided that the battery would have to engage at an entirely different point in the sky. Without removing the tape over the dials, let us move the radar to point at that spot in the sky where, as the great god Thor already knew, the unit would open fire. Sergeant, move the radar to the second point—azimuth 2,350, elevation 645, and slant range 9,000. You recall, also, that with

the 'spot' system the firing data at this point would be in error, as we previously demonstrated. We have traversed 1,600 mils from the original point, we have decreased the elevation 10 mils and we have decreased the slant range 1,000 yards. Here is the data that the great god Thor said would get hits:

Firing Azimuth	2,357
Firing Elevation	753
Time of Flight	17.52
Fuze	17.58

"Here we read from the computer dials what the battery commander would have used as a result of the trial fire:

Firing Azimuth	2,357
Firing Elevation	753
Time of Flight	17.52
Fuze	17.57

"Now we will strip off the tape and see what our dials read."

With a flourish, the Major ripped off the tapes. All eyes strained to read the computer dials.

"Here is what the great god Thor said were the *actual* met conditions and here is what the computer determined them to be:

<i>Actual</i>		<i>Computed</i>
Wind Speed	25 mph	25 mph
Wind Azimuth	3,600 mils	3,600 mils
Density	103	103

Are there any questions?"

The gun sergeants looked at one another. Finally one said, "Sir, I take back my remarks about this machine. I'm going out there and get that crew of mine together and I promise you that, if the boys in here do their job, we'll carry our end OK. From now on out I'm bearing down on O&S and gun level."

"We're convinced," they said as a man. At that we broke up the meeting.

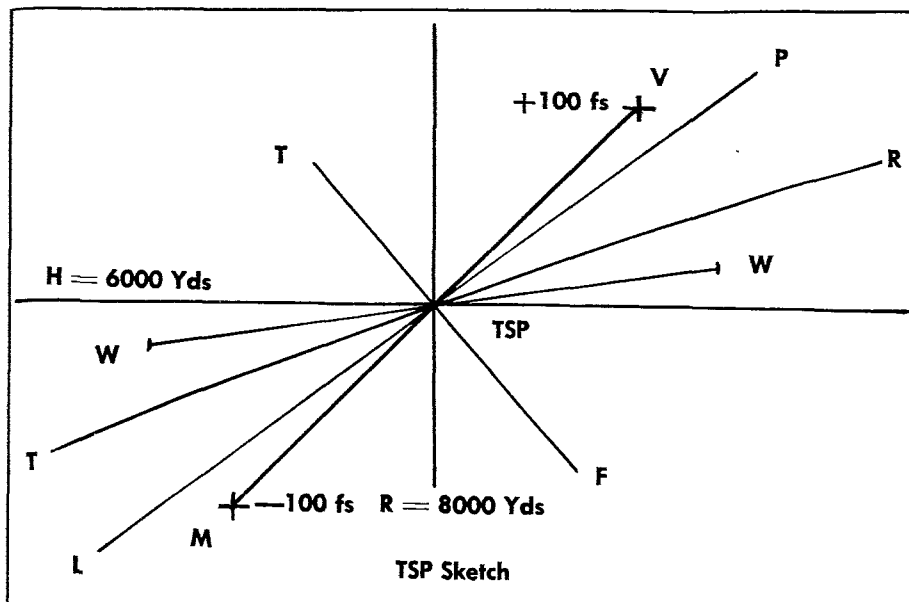
We had the best shoot ever that year and I often wondered what the great god Thor thought as he floated by on his cloud.

PS: You, too, can work out the problem. Warm up your M-33 and try it out!

Editor's Comment

We hope you may enjoy trying this out on your M33 as much as we did observing it. You will find it gives a splendid illustration of the accuracy capabilities of that computer. It can be used in the battalions for interesting and valuable instruction.

If you have read Colonel Mountain's



article in the March-April JOURNAL and his letter in the May-June issue, you will know that he and his engaging sidekick, Major Bartlett, are teaching a method of trial fire—their version of the Bell Laboratories method. This method is used by a number of battery commanders to the exclusion of the velocity fire as taught at the AA & GM School. No doubt it has some merit, but it also has some basic faults which you should study well. So, we renew the argument.

In the first place just inquire how many AAA batteries in World War II ever had a chance to fire trial fire just prior to a battle engagement with enemy planes. Then, if it isn't practicable in war, why delude ourselves in target practice?

Note next that Major Bartlett presumes that the battery commander knows his muzzle velocity, but that his met message is incorrect. Isn't the cart before the horse? How shall the AAA commanders ever know their muzzle velocities so well until they give more attention to velocity fire and the meticulous accuracy required therewith, including accurate met data. Maybe the met data has been poor in the past; even so, that is something that can be corrected by AAA commanders. Whereas, except for rare chronograph firing, the muzzle velocity for each lot of ammuni-

tion has to be determined by velocity fire.

Study the basic gunnery involved and particularly the differential effects that may apply at the TSP.

In trial fire the deviations of the burst center, in the vertical plane as recorded may be due to errors in any of the following elements:

- ϕ , elevation, error in gun laying or observation;
- D, range, error in observed deviation;
- d, atmospheric density;
- W_R , range wind;
- MV, muzzle velocity;
- t, time of fuze running.

Note the TSP Sketch. Assuming in each case all the other conditions to be as expected, note that variation in muzzle velocity will move the burst along the MV line; variation in fuze running time, along the trajectory TR; error in elevation, along the time of flight curve TF; error in density along the density effect line, not plotted but nearly the same as the MV line; and an error in range wind will move the burst along the range wind effect line WW. If unknown errors are likely in any of all the six variables above, the problem is simply beyond mathematical or graphical solution. Nor can any ingenious instrumentation insure a sound solution.

Colonel Mountain assumes that his

deviations in trial fire are entirely due to wind and density errors. Then, solving on the same assumption, he naturally comes out very well indeed. However, the deviations may just as likely be due to elevation error as to wind and density errors. Assume such an error and plot the burst center low or high on the TF curve. Then you will find that Colonel Mountain's solution will give you erroneous corrections both in range wind and density. Now swing to another part of the field of fire and see how those corrections work. Or the deviations may be due to variation in time of fuze running. In space the results are nearly the same as for range wind error. Try that out in a problem and note results. The inevitable conclusion is that you cannot be sure your corrections are accurate because you cannot separate the effects from meteorological errors, with certainty, from the effects due to other errors.

The better procedure is to eliminate or minimize every possible error. By careful training, errors in gun laying and burst observation can be eliminated; however, the only sound procedure in trial fire or velocity fire is to double check gun laying and also to use two independent means of observation.

Valid met data can be provided to minimize wind and density errors. For dependable results messages should be run both before and after the firing. Here, too, some valid checks on the accuracy of the met data should be made, and that is not now normal.

With the errors in elevation and in wind and density data reduced to a minimum we can solve for muzzle velocity in a scientific manner by velocity fire. And that we still rate in first priority because we don't believe trial fire just before battle engagement is practicable.

We thoroughly agree with Colonel Mountain in his emphasis on accuracy in level, orientation, and synchronization. In fact, we agree with him uniformly, except we don't share his enthusiasm for trial fire. But agree or disagree, we hope to publish more of his splendid articles.—ED.

BOOKS OF NOTE

TRIUMPH AND TRAGEDY. By Winston Churchill	\$6.00
A STILLNESS AT APPOMATTOX. By Bruce Catton	\$5.00
ATOMIC WEAPONS IN LAND COMBAT. By Colonels Reinhardt and Kintner	\$3.95
THE RIVER AND THE GAUNTLET. By S. L. A. Marshall	\$5.00

Order From **ANTIAIRCRAFT JOURNAL** • 631 Pennsylvania Ave., N.W. • Washington 4, D. C.

AAA OPERATIONS CENTER

By LT. COL. LEONARD M. ORMAN

DURING World War II Antiaircraft Operations Detachments used Operations Center AN/TTQ-2. Although this equipment was transportable it was not mobile enough. It is packed in 13 cases and requires 4 to 6 hours to assemble for operations or repack for movement. Furthermore, it had all of the attendant disadvantages of emplacement in a tent. The tent was inadequate during black-out, rain or heavy wind.

A project was set up during 1945 to improve the mobility of AAOC's. Operations Center AN/MTQ-1 is the result. It consists essentially of the AN/TTQ-2 repackaged in a 30-foot semi-trailer van. The horizontal plotting board has been replaced by a vertical translucent screen. This screen and the tote board forms a partition with a door between the plotting and operations areas. The entire equipment can be removed from the van and emplaced in a building by 6 men in 4 hours. It can be replaced in the van in a similar period of time.

Aside from mobility and a better shelter the AN/MTQ-1 offers little over World War II equipment. For this reason development was begun on Operations Center AN/MTQ-2. Here an attempt was made to take advantage of some advances in electronics to give a

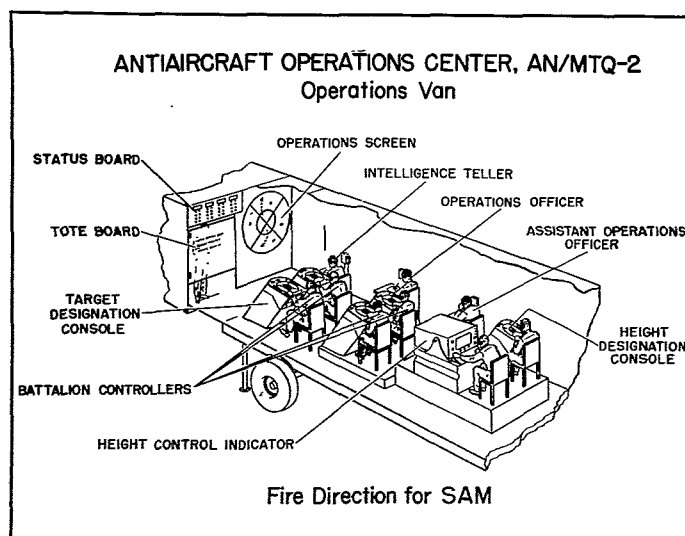
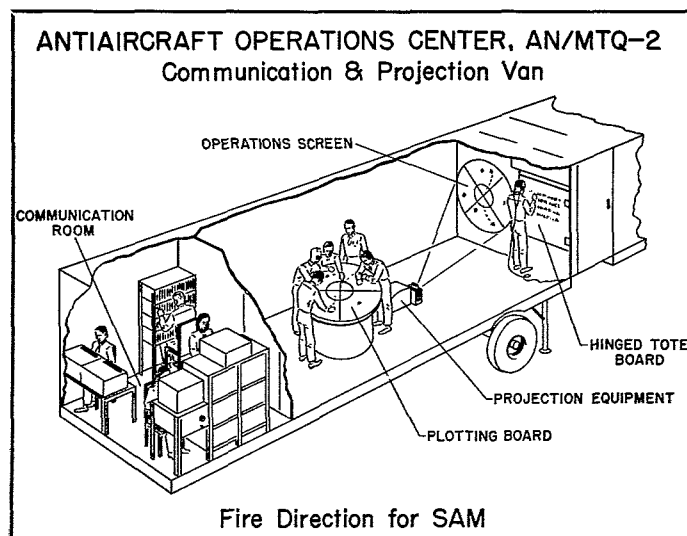
tighter degree of fire direction to the AAOC.

The AN/MTQ-2 consisted of 2 vans which could be connected end to end to form a single field AAOC. In addition to communication, heating and cooling equipment, it contained 2 devices new to AAOC's. These were the Kenyon Projection System and Remote Parallax Correction PPI Scopes, the AN/SPA-8A's. The Kenyon Projection System is a rapid photographic development process similar in some respects to the Land Polaroid Cameras now on the market. The central surveillance radar is remotored into the communications van. Here the PPI scope is photographed, the photograph is developed and projected onto a horizontal projection surface. The plotters add any information received from other sources by grease pencil plots to the displayed information. The composite picture is again photographed and processed. The completed picture is projected on the wall at the end of the van where it is then visible to the operations personnel.

IN the operations van are four identical remote PPI scopes. The central surveillance radar presentation is also re-

motored to these scopes. The officer seated at these scopes can observe targets on the scope or see the composite projected picture. From these sources of information he can assign targets to the batteries of a battalion. One officer should be able to handle target assignments to four firing units. The AN/SPA-8A remote PPI scope has one unique facility, i.e., parallax correction can be made directly from the scope face. By previously setting into the scope the parallax between the AAOC central surveillance radar and the firing units the center of the PPI scope can be displaced to any of the 4 firing units and range and azimuth can be read directly. In other words, a target can be assigned to a unit with the range and azimuth of the target measured from the unit's position and not from the position of the central surveillance radar.

In addition to the facilities mentioned, the AN/MTQ-2 has a radar height-finder, the AN/TPS-10D (not to be confused with radar set AN/TPS-1D, the "Topsy," an entirely different set), status and tote boards. The controls of the height-finder are located in the rear of the operations scopes. Height on targets is obtained by the height-finder operators and displayed on the tote board.



While the service test of the AN/MTQ-2 revealed that it is not satisfactory for AA use in its present form it does serve to indicate a trend.

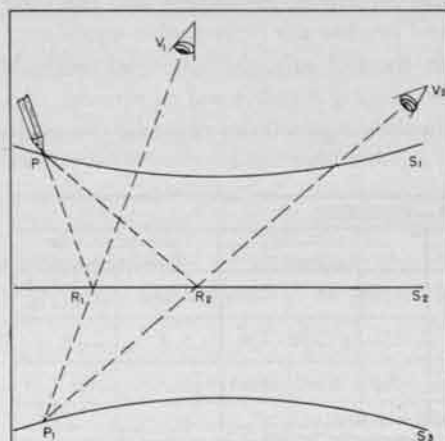
In World War II the AAOC operated only as an information center for the firing units. AAA gun battery commanders independently selected the targets for engagement, guided only the SOP. Even then it was realized that a better distribution of the AAA fires on the enemy planes might be achieved by centralized control if it were only practicable. With the advent of the Nike among anti-aircraft weapons the need for centralized control appears to be greater and also more practicable.

Reflection Plotter

A gadget introduced on commercial marine radars which may have application to military sets is the reflection plotter shown here. With it plots can be made directly on the radar scope without distortion or parallax. The markings on the surface are projected down to the scope in such a way as to appear directly on the targets as a part of the radar

picture. This optical effect is achieved by curving the plotting surface (S_1) to match exactly (in reverse) the curvature of the PPI screen (S_3) as shown in diagram.

A partially reflecting glass (S_2) is placed midway between the plotting surface and the PPI screen. The light rays of a pencil marking at P, for instance, strikes the reflection glass at R_1 and is partially reflected to the eye (V_1) and will appear to originate from the point P_1 on the extension of the line



$V_1 - R_1$. Thus the marking seems to be made on the PPI surface directly on the target itself. The effect remains unchanged from any other angle such as V_2 . The marking always appears to merge with the target directly below it.

This device is presently being investigated for use with Radar Set AN/TPS-1D, more familiarly known as "Tipsy." It can be applied to any set.

STUDY OF MILITARY HISTORY

Any satisfactory program for self-improvement should be progressive and appropriate to the grade of the student. The works included should provide the officer with professional background appropriate to his level of responsibility and eventually with an ever-broadening understanding of military art and science and of the relationship of military policy to the foreign and economic policies of the United States. In the past this progressive aspect of historical study has been neglected with the result that officers have tended to prepare themselves for the role of war lord, such as Alexander, Frederick the Great, Napoleon, or of a great military leader such as Caesar, Washington, Grant, Lee, or Foch, instead of preparing for their more probable assignments or those next above. As a result, too many American military men have neglected the fighting man, basic leadership, minor tactics and logistics, weapons, and communications. The study of these subjects should begin early in an officer's career and continue in ever-expanding fashion, throughout his service.—From Brig. Gen. Paul M. Robinett's manuscript for the forthcoming book, *THE STUDY AND WRITING OF AMERICAN MILITARY HISTORY*, by the Department of Military History, U. S. Army.

SELECT LIST FROM BOOKS RECOMMENDED

For First Five Years' Service

The U. S. Army in War and Peace, Spaulding
History of the United States Navy, Knox
Decisive Battles of the United States, Fuller
The Military Staff, Hittle
Rag, Tag and Bobtail, The Story of the Continental Army, 1775-1783, Montrose
The Life of Johnny Reb, Wiley
The Life of Billy Yank, Wiley
Men against Fire, Marshall
Fix Bayonets!, Thomason
Eleven Generals: Studies in American Command, Pratt
Company Commander, MacDonald
Indian Fighting Army, Downey
Infantry in Battle, Infantry School
Small Unit Actions in Korea, Gugeler

For Second Five Years

Machine Warfare, Fuller
On War, Clausewitz
Captain Sam Grant, Lewis
Stonewall Jackson and the Civil War, Henderson
Lee's Lieutenants—A study in Command, Freeman
Sherman—Fighting Prophet, Lewis
War as I knew It, Patton
The Influence of Sea Power Upon History, Mahan
American Campaigns, Steele
The Martial Spirit—A Study of our War with Spain, Millis
Approach to the Philippines, Smith
Guadalcanal: The First Offensive, Miller

ORDER FROM THE ANTI-AIRCRAFT JOURNAL

BEFORE YOUR UNIT MOVES

By CAPT. CARL M. GUELZO

THE movement of a unit from one station to another by rail really isn't the hopeless task it appears to be at first. It involves several actions and reports which may challenge the average battalion commander, but fortunately every Army post has a transportation officer and others who are professionally qualified by experience to give very practical help. Just as soon as you get the word of warning that your battalion will be on the move by rail, go to see the post Transportation Officer. He can help you to start your preparations along the right line. Take up with him special problems you anticipate in loading and blocking and bracing the organization equipment on the rail cars, the approved methods of marking supplies and equipment, and the loading facilities that will be made

available to you. He knows the facilities available for loading and entraining at your post and how they can be used to best advantage. He will also contact other post agencies for you in solving other problems connected with the move such as messing facilities, blocking and bracing, and route clearance to the loading and entraining areas.

Unit moves require an enormous amount of coordination, cooperation, and pre-planning not only by you and your battery officers, but by your battalion staff, especially the S4, and almost every other post agency you can think of. The expense involved is considerable—so much so that the Installation Transportation Officer (ITO) is virtually compelled to wait until he receives your formal movement orders before contacting the railroad companies to secure the necessary equipment. He won't just sit back because a good deal of prior planning is not only necessary for the transportation agencies involved but will also make his job and yours vastly easier.

From the battalion commander the ITO will first of all want the official orders for the movement. In addition, he'll also need the number and breakdown of personnel (officers, warrant officers, and enlisted men); the supplies and equipment to be shipped; the destination of your unit and the date by which you must be at that destination; the date you desire to load; and the desired place of entrainment, departure, and loading. The personnel, supplies, and equipment to be moved can be furnished in conjunction with the information to be provided by your battalion S4; the destination and arrival date will come through official channels via the movement orders; and the remainder will be derived through coordination with the other post agencies involved in the move.

RAIL MOVEMENT TABLE--PERSONNEL										
Line #	Unit	Strength				Checkable Baggage			Passenger Car Requirements	
		O	WO	EM	Total	Pieces	Wt	Cube	Coaches	Pullman Section
1	Hq & Hq Co, 3d Inf	21	1	263	285	614	49120	2456	5 f	142½
2	Service Co	8	3	175	186	394	31520	1576	3 f	93
 										
Totals		88	4	1848	1940	4064	325120	16256	37	970

Fig. 1

TRAIN CONSIST TABLE							
Train	Unit Grouping	Railway Equipment					
		Coach	Pullman		Kitchen	Baggage	Box
1	Regt'l Hq & Hq Co Bn Hq & Hq Co	0	4	10	2	1	0
2	Heavy Tank Co Heavy Weapons Co	0	4	9	2	1	0
<hr/>							
5	Co C Heavy Mortar Co	0	4	10	2	1	0

Fig. 2

ENTRAINING TABLE									
Trn #	MAIN or MI Number	Order of Departure	Loading		Departure		Arrival		Entraining Officer
			Date	Hour	Date	Hour	Date	Hour	
1	MAIN 542	1	8 Apr	0810	8 Apr	0910	14 Apr	0730	Lt Edwards
2	MAIN 543	3	8 Apr	1220	8 Apr	1320	14 Apr	1430	Lt Dryer
<hr/>									
5	MAIN 546	5	9 Apr	0600	9 Apr	0700	15 Apr	0110	Lt Smith

Fig. 3

INDIVIDUAL TRAIN LOADING PLAN					
Car No.	Unit	Number of Pers	Car No.	Unit	Number of Pers
BE	Personal Baggage	--	2	Medical Company	27
<hr/>					
USAX	Kitchen car	--	213	Officers of Med & Tk Cos	16

Fig. 4

Captain Guelzo, a former contributor to these pages from the 3rd AAA AW Battalion in Korea, is now back in the Far East with Otaru Port.

RAIL MOVEMENT TABLE--EQUIPMENT																						
Line No.	Unit	Organizational Equipment			Standard Vehicles								Special Equipment			Freight Cars Required						
					Trailers			Trucks								Box	Flat Cars				Total Cars	
		Pieces	Weight in pounds	Measurement Tons	$\frac{1}{4}$ Ton	1 Ton		1 Ton, Cargo	$\frac{1}{4}$ Ton, 4x4	$\frac{3}{4}$ Ton, 4x4	$2\frac{1}{2}$ Ton, 6x6	10 Ton, wrkr		Quantity	Item	Shipping length in inches	40-foot	40-foot	45-foot	50-foot		38-foot
1	89th Med Tk Bn	750	120,000	180	10	5		31	30	3	39	2					3	15	2	25		45
2														2	M4 Tk	198		1				1
3														72	M4A3Tk	276		72				72
<hr/>																						
9	Totals	750	120,000	180	10	5		31	30	3	39	2					3	95	8	28		134

Fig. 1a

From the battalion S4, the ITO will need four basic reports:

Rail movement table: listing a breakdown, by organization, of personnel, baggage, and Pullman or coach space requirements (see Fig. 1). A separate table is prepared for the supplies and equipment to be moved (see Fig. 1a). An equipment worksheet (see Fig. 1b) will help in preparing the equipment table.

Train consist table: listing a breakdown by trains (if more than one) of the type and number of rail cars required (see Fig. 2). The ITO can give you all the information you or the S4 will need regarding the types of rail equipment available and the capacities of Pullman and coach cars and freight cars.

Entraining table: listing a breakdown by trains (see Fig. 3) of the order of departure of the trains; dates and hours of loading; dates and hours of departure; and the date and time of arrival at destination. Any questions the S4 may have regarding the routing of the trains and the travel time involved will be an-

swered by the ITO who maintains contact with the railroad authorities.

Individual train loading plan: prescribing the assignment of personnel to the exact rail car in which they will ride and listing the individual freight cars on which the unit supplies and equipment will be loaded (see Fig. 4). The ITO will tell the S4 not only the types of rail equipment to be furnished, but the car numbers as well.

After receipt of all this information from you and the battalion S4, the ITO will in turn do a number of things for both of you. First of all, he will secure clearance for the move from the Chief of Transportation, Department of the Army. Besides providing the means of transportation, the Transportation Corps is also charged with the responsibility of traffic management for the Army. The move of your unit will be coordinated with the moves of all other units throughout the entire country which take place at the same time as yours to prevent unnecessary delays, ensure maximum

utilization of rail equipment available, and guarantee that the best and most direct routing is used not only for your move, but that of every other move being made by organizations or agencies of the army.

When the battalion S4 completes his equipment worksheet and the rail movement table, the ITO will utilize both forms in preparing the vehicle and equipment loading plan. This plan lists, among other things, the type of equipment to be loaded aboard freight cars, quantity, data necessary for the computation of rail charges, weight of the equipment, dimensions of each piece of equipment, and the number and types of freight cars required and to be used. The plan is used in ordering the precise type of freight car needed for each piece of equipment—whether it be a boxcar or a 40-foot, 45-foot, or 50-foot flatcar—and to ensure maximum utilization of all railcars so ordered.

Rail rate structures in use by American railroads in computing transportation

EQUIPMENT WORKSHEET												
Military Equipment				Freight Cars Required								
Total Pieces	Description	Per Car	Total Length	40-ft Box		40-ft Flat		45-ft Flat		50-ft Flat		Total Cars
				No.	Length	No.	Length	No.	Length	No.	Length	
750	89th Medium Tank Bn	250	in bulk	3	in bulk							3
2	Organizational Equipment	2	396"			1	480"					1
72	Tank, heavy, M24	1	296"			72	480"					72
24	Tank, medium, M4A3	8	532"							3	600"	3
12	Truck, 1/4 ton	2	514"					6	540"			6
8	Vehicle, utility, armd	4	560"							2	600"	2
	Trailer, ammunition											
Rail equipment totals				3		95		8		28		134

Fig. 1b

charges are highly complex, differing not only by the type of commodity being shipped but also by the total weight and whether or not shipments constitute a full or partial carload. Neither you nor the battalion S4 need concern yourselves with the transportation charges, but the information you provide the ITO will be used in figuring what is to be moved and the most economical way of moving it making full utilization of rail equipment. The waste is obvious of ordering a 50-foot flatcar when a 40-foot flatcar will do the job, as is the confusion of specifying a 45-foot flatcar for supplies which should be loaded in a boxcar. The accuracy of the information you furnish the ITO is reflected in his vehicle and equipment loading plan which, in turn, determines the rail cars which will be ordered and the ultimate cost of the move to the Government. It behooves the ITO to order only the cars actually needed and in a quantity that can be loaded to secure most effective utilization.

It is possible that the railroad may not be able to fulfill all requirements. But every effort will be made to provide the type of cars requested, or at least suitable substitutes. For example, you may not get the kitchen cars you ask for, but in their stead the railroad will furnish you with baggage cars that can be converted into troop kitchens. You may not get first class Pullman sleepers, but tourist sleepers instead. But no matter what the transportation situation may be, don't expect parlor, bar, or observation cars.

In addition, the ITO will contact several other post agencies to assist you in moving your battery. He will coordinate with the Post QM to ensure that sufficient rations and mess equipment are furnished for the move; he will see the Post Engineer about giving you all the assistance you will require in blocking

and bracing your equipment after loading on the railcars, crating where necessary, and marking; the Post Finance Officer will be asked to provide funds where necessary to purchase perishables en route; the ITO will contact the Post Surgeon about furnishing medical supplies and attendants for the trip; and the Provost Marshal will be requested to prepare routings and traffic control to loading and entraining areas.

And after everything else has been done, the ITO will prepare the TR's and Government Bills of Lading which authorize payment to the railroad for the passengers and freight transported.

When the time comes for your battery to pull up stakes, certain items of information will be furnished you by the ITO. You will be informed of the time your train will depart and its ultimate destination, and the exact type of rail equipment the civilian carrier is furnishing. You can figure rather closely for yourself what you can expect in the way of railcars.

You will be authorized one kitchen car (or a baggage car that can be converted into a kitchen car by the addition of field ranges and other items of mess equipment) for every 250 men or fraction thereof provided the total number of personnel is in excess of 100. If you know either the total weight or the total cubic footage of the personal baggage that will be checked by your officers and men, you can figure the number of baggage cars that you will need on the basis of one car for every 50 tons or 4320 cubic feet. Freight cars will be furnished in accordance with your needs. You can use as planning factors in computing the number of passenger cars, one Pullman for every 26 men, or one daycoach for every 55 men.

In physically moving your battery, vir-

tually all of the prior planning will have been accomplished prior to the actual moment you move out to the entraining area. Your unit equipment will have been loaded under the supervision of representatives of the Post Engineers and the passenger cars spotted at the loading point at the appointed time through coordination with the railroad. By that time, all you need do is ensure that your men are loaded aboard their respective Pullmans or coaches in an orderly manner and as quickly as possible. The movement of your train has been carefully mapped out and scheduled to fit into both the over-all military transportation scheme and the normal freight and passenger traffic of the railroad.

The battalion S4, however, still has one job left: To prepare Army Shipping Documents covering all the equipment loaded aboard rail cars. These shipping documents are used to support the bills of lading prepared by the ITO, which in turn are used by the railroad in securing reimbursement for services rendered, from the Government. Again accuracy determines to a large extent savings to the Government, because the descriptions, the weights, and the cubic footages that appear on the documents must also necessarily appear on the bills of lading—and it is on the bills of lading that disbursements of Government funds are made.

We've talked a good bit about money so far because we believe the cost may amaze you. Check with your ITO on the cost of a rail movement of an AAA gun battalion with all personnel, supplies, and organic equipment and weapons.

The ITO, if I may coin a phrase, is a transportation man, not a medicine man; but he is there to help you when and where he can and, if both you and he are stumped, to ask the appropriate agency who will be able to help.

BEING TRANSFERRED?

If so, send us your new address. If you do not yet know the new address, write us to suspend mailing your JOURNAL. Then we hold it here and forward when we do get your new address. That will give you better service.

References

AR 55-120 & AR 55-145: Marking and shipping personal baggage.

AR 55-155 & TM 9-2854: Information about blocking and securing vehicles.

AR 380-5: Safeguarding security information.

AR 850-5: Marking.

SR 55-720-1: Unit moves to overseas destinations.

TM 38-705: Preparation of Army Shipping Documents.

MOBILE AN/TPS-ID

By MAJOR VICTOR DeSTEFANIS, S3, 65th AAA Group

AAA units equipped with the AN/TPS-ID radar set and faced with the dual problem of housing and siting can solve their problems at one stroke by installing the radar in a standard M-109 or M-34 2½ ton Ordnance repair shop type truck. Addition of a conversion board and AN/GRC-9 radio and a one ton trailer to hold the power unit makes a complete radar search and plotting central in one package. No other vehicles are necessary other than that required to haul personnel to and from the site.

The unit described herein is the M-109 installation and is an outgrowth of an installation in the older M-34 type vehicle. These installations have been valuable in Panama for evaluating many radar sites and for mobile operation. No difficulty has been experienced in one year of operation in the extremely rugged terrain and high humidity of the Canal Zone.

The units are so arranged in the truck that:

1. Each drawer can be individually removed for maintenance. There is plenty of "elbow room" in the van for technicians to set up test equipment.

2. The indicator is placed on the same side of the truck and facing the transmitter-receiver unit. This permits the operator to tune the transmitter-receiver assembly while watching the scopes directly.

3. An internally illuminated conversion board constructed of two sheets of plexiglass set in a box containing an electric light is mounted vertically between the windows. A suitable map with

the appropriate grid is inserted between the plexiglass sheets. A message center clock is placed next to the board.

4. An AN/GRC-9 radio is mounted next to the conversion board near the rear of the truck. The plotter transmits the converted data. EE-8 telephones are also available if needed.

5. Two spare parts chests are stored behind the radar set in opposite corners of the truck.

6. In march order position the main center section of the antenna is carried inside the van and bolted to the floor. The antenna tips are also carried within the van. The inside sections of the antenna are carried strapped to the top of the one ton trailer.

7. One PU 107/U generator is carried in the one ton trailer with gas and oil. The standby generator is hauled to the site by the same truck that delivers the crew. If the driver and assistant are radar operators the set can go into operation immediately upon arrival. Going into or out of position can be accomplished rapidly by two men, in less than fifteen minutes.

8. Heat from the set is sufficient to keep operators warm in cold weather. Blowers in the truck circulate the air. In warm weather any or all of the windows and doors can be opened and hoods used over the scopes if necessary.

9. Leveling is accomplished by adjusting the jacks on the antenna base. The unit is remarkably stable. On hard, firm, level ground it is only necessary to use two 2" x 4" timbers braced between the truck body and ground between the two sets of rear wheels. No jitter is experienced even when bringing the antenna to a sudden full stop from maximum rotation speed.

The only major alterations to the truck are the removal of one 23" section of the center duct in the ceiling and an 8" hole cut in the roof to permit passage of the antenna spindle. It is not necessary to cut or rearrange any of the truck wiring. The entire set is mounted in and supported by a simple and rapidly constructed frame of 2" angle iron (see sketch). Additional materials are a few bolts of 4, 8 and 12 inch lengths for se-

curing the equipment.

The resultant benefits of this extremely simple solution are:

► Siting: Rapid and complete evaluation of a large number of sites is possible.

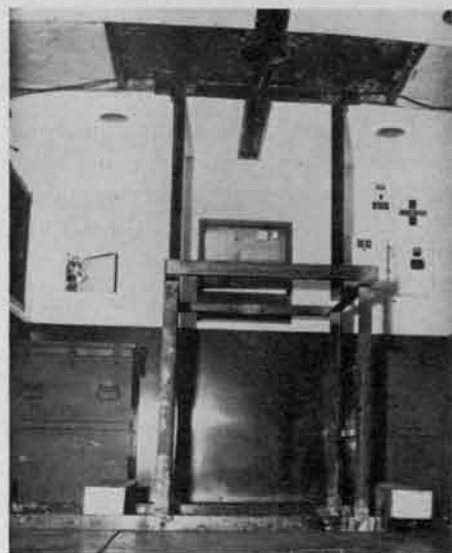


Figure 2. Rack to support radar antenna.

► Flexibility of the radar network. Rapid and periodic shifting of sites to minimize exploitation of otherwise fixed shadow areas by enemy air forces is possible.

► Centralization of critically short repair personnel and facilities. The mobile sets can be driven to centrally located, well equipped and staffed centers for major emergency maintenance and/or periodic overhaul.

► Maintenance: Experience has shown that maintenance problems are reduced drastically since it is unnecessary to uncable, unstack, cable and restack the equipment at each move. The equipment rides easily in its rack and no damages have been sustained due to travel.

► Use of standard units: The M-109 and radar are "married." When union is no longer necessary simple repairs will release the M-109 for other uses.

► This solution places complete mobile radar search and plotting centrals in the hands of units presently equipped with the basic AN/TPS-ID without waiting for a far more expensive item which has no other advantages and, in some respects, serious disadvantages



Figure 1. Mobile radar installation in operating position.

Skysweeper In Ground Supporting Fires

By MAJOR DONALD B. MILLAR

SOME day in battle the matter will come up for decision, does the Skysweeper offer any value to the army commander for reinforcing the artillery supporting fires. What about it?

The Skysweeper is an exceedingly expensive weapon with radar and other electronic equipment possibly too delicate and too expensive even for the AA role. Thus far it has not been considered suitable for indirect ground firing roles for the following reasons:

1. Primarily, there is no way at present to compensate for trunnion tilt. Therefore, the guns cannot be laid accurately nor massed effectively.

2. The weapon is designed for AA fire, and the cost of the weapon does not warrant exposing the expensive radar and fire control system to counter-battery fire.

3. The high velocity of the gun prevents firing at targets in defilade, and its effectiveness at all ranges is greatly affected by any mask that may be present.

4. The shell has limited destructive power due to its size.

5. Mobility of the weapon is such that it cannot compete with comparable field artillery pieces.

6. The high silhouette of the weapon makes cover and concealment difficult.

However, the time will come when the army commander's need for more artillery support is all-important—and more important to immediate needs than will be the cost or vulnerability of the Skysweeper. In that light the six points outlined above may be reexamined further as follows:

1. During the recently conducted



Adapters and sights for indirect fire

Skysweeper troop tests the problem of compensating for trunnion tilt and accurate laying of the gun was solved. The project officers designed and, with the help of Ordnance, fabricated adapters to mount the panoramic sight mount and range quadrant M4 on the direct fire sight bracket of the Skysweeper. The photo shows the adapters and sights mounted on the 75mm gun. The adapters allow normal field artillery procedures and commands to be used in the event the most forward guns in the AA checkerboard defense are called on to reinforce the fire of an adjacent FA unit. However, should the Commander plan to use the Skysweeper, it will be necessary to obtain the adapters and sights from Ordnance.

2. If the enemy air force is shot the cost of the Skysweeper may lose relative importance compared to the urgent need for artillery. The vulnerability of the Skysweeper can be minimized by using only one or two guns at one emplacement giving the enemy only a point-type target which is difficult to hit. In addition, the Skysweeper can fire 23 rounds in 30 seconds without reloading. This factor, coupled with the ability to mass fire effectively, precludes having to group a large number of guns in one area.

3. The Skysweeper has the disadvantages of any high velocity weapon, such as large probable error, difficulty in engaging targets on reverse slopes, and

masking. However, by a judicious choice of targets the Skysweeper's capability can be utilized.

4. The lethal area of the 75mm shell is less than that of the 105mm or 155mm projectile, but Skysweeper's increased rate of fire over these weapons compensates for this deficiency.

5. The Skysweeper sites will have to be selected with care, but suitable ones can normally be found for worthwhile targets.

6. It has a high silhouette compared to other FA weapons, and this defect cannot be overcome except by camouflage and fortification.

Here are some of the results of the troop test which may present a better picture of the capabilities of the Skysweeper as an indirect fire weapon. Three 2-gun batteries were employed during the test. The distance between batteries was approximately 1,500 yards laterally, 600 yards in range, and 60 yards in elevation.

► No difficulty was experienced in conducting precision registration. An average of 14 rounds was required to complete a precision registration.

► One gun adjustment was used on all observed fires where adjustment was called for by the observer. An average of 5 rounds was required for adjustment. Effect on the target was obtained on all WILL ADJUST missions.

► Target transfers of 400 mils laterally and 1,500 yards in range were made; each battery delivered effective fire on the target during all transfers. The area covered by the 3 batteries in fire for effect covered approximately 100 yards in radius.

The Skysweeper is not very suitable for ground supporting fires, and it is not intended here to make it out as one. However, the time will certainly come when its use in that role is demanded, and it is pertinent to give it some thought now.

Major Millar entered the Antiaircraft Artillery with the Delaware Guard in 1940. Winning his commission in OCS, he served in World War II with AAA in the Pacific and later as an instructor at the School. Now a member of the Combat Developments Department, the AA & GM Branch, TAS, he served as the Assistant Project Officer in the Skysweeper Troop Test.

DO YOU KNOW MILITARY DISCIPLINE?

By LT. COL. ROBERT M. HUSTON

WHAT do you know about military discipline? As a commander, from squad leader to battalion commander, do you really understand what discipline is? Can you explain it intelligently to your subordinates? Do you know why it is necessary? Do you know enough about it to develop it in your men and in yourself? These are vital questions to the career soldier. They are vital in carrying out his responsibility for the safety and welfare of the Nation. They are also vital to his own safety in time of battle and his personal satisfaction and happiness in time of peace. Before we try to give an answer as to what military discipline is, why it is necessary, and how to obtain it, I am going to quote an excerpt from General "Slam" Marshall's book "The River and the Gauntlet." This relates to the situation in Company K, 9th Infantry, during the battle of the Chongchon River, Korea, on the 25th of November 1950. On the night of the 25th of November, Company K, in outpost position for the Eighth United States Army, was hit by the main body of the Chinese offensive. This information never got back to higher headquarters. To quote General Marshall: "Though at the forefront of the Eighth Army, the Company remained out of contact with every element to its rear. Distance and terrain features silenced the SCR 300 (radio). Sgt. Alfred Bigger was sent from Battalion to run a telephone line to King Company. But as Bigger told the story of his failure, he was given *heavy wire* instead of light 130 which is useful on such missions. So he couldn't carry it over the hills and thereby take the shortest line between two points. Instead, he followed the

waterline, and his wire ran out before he had covered two thirds of the distance. There his personal striving ended and with that failure King Company, left alone in a great void, ceased to operate as the outpost of an Army."

What is the point to this story? Military discipline today is of necessity individual rather than mass. In the days of Caesar and Napoleon, armies fought in mass formation under direct supervision of higher commanders. Discipline could be enforced by the direct influence of a strong commander and held together by the mass. Today, the weapons of war do not permit personnel to be massed. War is fought by small units and individual technical personnel who operate and service the complicated equipment of war. Therefore discipline must be understood and instilled in individuals, not in units. It can not be controlled by forceful leadership of a few. Military discipline, today, is obtained when the individual, and I repeat individual, without supervision and in the face of difficulty and personal disagreement can be depended upon to carry out orders that have been given or, in the absence of orders, those orders that he believes would have been given. Sgt. Bigger did not possess this type of discipline. As a result, his failure to carry out his assigned task in the face of difficulty contributed to the decimation of King Company and deprived Eighth Army of necessary information needed to react quickly and intelligently in an extremely serious situation.

I BELIEVE Sergeant Bigger's case portrays the necessity for discipline as we have defined it. Aside from the necessity for discipline in battle, discipline contributes toward personal satisfaction throughout your service by developing a single will, in yourself and in your comrades, to serve your country regardless of personal difficulties and sacrifice. Discipline welds you and your comrades

into a tough hard team, with service as its primary goal and reward. Belonging to such a team is the principal satisfaction of an Army career. This fact has been recognized by the Womble Committee, named for Admiral Womble. This Committee has just completed a study of career attractiveness in the Armed Forces. Based on a survey of opinion throughout the Armed Forces and a study of all factors involved in making a career attractive to its professional service personnel, the Board came to the conclusion that proper discipline was one of the principal factors contributing to career attractiveness.

We have defined and illustrated the necessity for discipline; now let us determine what methods we shall use to instill this discipline in ourselves and our subordinates. First of all everyone must understand what military discipline is and why it is necessary. The individual must realize that it applies to him personally. This is accomplished by periodically defining discipline and citing examples. Discipline is then obtained by supervision and training during which all commanders, from the squad leader on up, require strict compliance with all orders, regulations, and customs. This is accomplished on the whole not by punitive measures but by persistence on the part of commanders in correcting all who fail to perform in the prescribed manner. For example, the new man is brought into the Army with very little idea of what military discipline means or why it is required. You will start by explaining what military discipline is and why it is necessary. Then you must explain to him that discipline is a personal matter which he must master not only in order to become an effective part of the team but for the personal satisfaction he will receive from knowing that he is contributing effectively to the service. The fact that through self-discipline his ability to meet the harsh requirements of battle may eventually not only mean self-preservation but preservation

Lieut. Colonel Huston enlisted in the Oregon Guard Coast Artillery in 1931, where he earned his commission in 1935. Serving with AAA in the Pacific in WW II, he recently commanded the 933rd AAA AW Battalion in Korea. He is now the Army Advisor, 198th AAA Group, Delaware.

of his comrades and his country. That this self-discipline is developed by accomplishing all tasks required of him regardless of his personal feelings. That he will be required to keep his brass shined, his boots polished, and his bed made exactly as prescribed, as a matter of disciplinary training. He will be supervised constantly to ensure that he does do these things. Man is a creature of habit. Once he creates the habit of performing all tasks large or small

whether with or without supervision, he has taken a long step toward obtaining discipline. When he reaches the point that he polishes his brass, shines his shoes, and makes his bed exactly as prescribed with the knowledge that he is performing measures of self-discipline by doing those things which he normally wouldn't do except that they are required; when he realizes that by so disciplining himself he is developing the will which will enable him to function

in battle when all the will power he has will be needed; when he realizes this, he has what we are talking about.

What do you know about discipline? If you know what it is, so you can explain it intelligently to your subordinates; if you know why it is necessary; if you know how to develop it in yourself and your subordinates; then resolve to yourself that you will do your part in ensuring that our Army will never fail for the lack of this vital quality.

THE ARMY LANGUAGE SCHOOL

By Captain B. B. Nichols

School Plans & Operations Officer

Colonel D. W. Hickey, Commandant

The Army Language School at the Presidio of Monterey, California, has developed into a well-organized institution that offers courses in twenty-four different languages. The school has its own reproduction plant for publishing textbooks and its own sound recording studio for producing audio aids; its own research library provides the students with extensive and up-to-date literature concerning the linguistic field. The students accepted for training are not only taught to speak, read and write a designated language, but they are also provided with basic military, geographic, economic, historic and political information about the country in which the language is spoken.

The twenty-four languages offered by the school are divided into four groups: The Far East Group consisting of Chinese-Cantonese, Chinese-Mandarin, Japanese and Korean; the Middle East-Slavic group consisting of Albanian, Arabic, Bulgarian, Czechoslovakian, Greek, Hungarian, Persian, Polish, Serbo-Croatian and Turkish; The Romanic-Germanic group consisting of Danish, French, German, Italian, Norwegian, Portuguese, Rumanian, Spanish and Swedish; and the fourth group devoted

exclusively to Russian. Except for the Romanic-Germanic group all courses are forty-six weeks in length. The Romanic-Germanic courses are twenty-three weeks in length, except the Rumanian course which is thirty-nine weeks.

The present Commandant of the school, Colonel D. W. Hickey, Jr., was commissioned in the Coast Artillery in World War I. During World War II he commanded the 54th AAA Brigade in Europe. Since the War he served as the Assistant Commandant of the Coast Artillery School and later as the Military Attaché to Pakistan.

Most of the teachers at the school are natives of the country whose language they teach. A few are native-born Americans who have been educated in the foreign country. All of them are required to possess a degree of fluency in English; many of them speak fluently in five or six other languages. Among the interesting instructors there are: A Russian Major General who refused repatriation after he had been captured by the Germans in World War II; an ex-cabinet member of an iron curtain country in Europe; a descendant of the last queen of the Lee dynasty of Korea; the son of a former prime minister of Japan;

and a nephew of Czar Nicholas II of Russia.

Some students have *applied for language training* under provisions of DA Pamphlet 20-21, SR 615-120-51, or DA Circular 40. After graduation they are given worldwide linguistic assignments. Others have *applied for assignments* which require knowledge of a foreign language. This group is comprised of applicants for Foreign Area Specialist Training or for duty within the Army Attaché System, as provided for in SR 350-380-1 and SR 600-147-1 respectively. Still other students have been *selected for assignments* which require knowledge of a foreign language. These individuals are utilized in the Army Security Agency, the C.I.C., psychological warfare assignments, military attaché system, military missions, military army advisory groups and joint United States military advisory groups.

Thus the Army Language School has developed a successful means of developing qualified linguists for the services. The graduates move on to apply their skill in their general work, or as a translator or interpreter. The best universities grant credits for the language courses completed.

UNIT ACTIVITIES

HEADQUARTERS ARMY ANTI-AIRCRAFT COMMAND

Lt. Gen. John T. Lewis, Commanding

"NIKE" came to Colorado Springs for Armed Forces Day. A complete model of the Army's new surface to air guided missile was furnished for display in downtown Colorado Springs by the Western Electric Company. Built to exact scale, the model included all the accompanying equipment necessary for operation of a missile site and is the only one of its kind.

Colonel Perry H. Eubank, Chief of Staff, departs in July for the Army War College. Colonel Walter F. Ellis, G3, has been assigned to the Career Management Division—Artillery, TAGO, Washington, D. C. Lt. Col. Ford E. Pratt, G4, has departed for duty with USARPAC.

Other staff members currently on orders include: Lt. Col. Raymond M. Clock, Engineer Officer, to Upper Mississippi Valley Division; 1st Lt. Arthur D. Hendricks, to USAREUR; and CWO Francis M. Wischer, to USAFFE.

Additions to the ARAACOM staff include: Lt. Col. Ervin H. Shumate and Major George A. DeMarcay, Jr., recent graduates of CGSC; and Capt. O. F. Doherty, from Korea.

Col. Robert W. Hain will soon arrive

from the Army War College; Lt. Col. Everett D. Light, from AFCS; Lt. Col. Merle J. Senn, Austria; Lt. Col. William I. King, CGSC; Maj. James C. Chandler, TAG School; Capt. Wallace N. King, USAREUR; and WOJG Robert A. Robbeloth, from Korea.

56th AAA BRIGADE

Brig. Gen. Harry F. Meyers, Comd.

By 1st Lt. Paul E. Joyce, PIO

Brigadier General Harry F. Meyers has reassumed command of the brigade. General Meyers has just completed two tours of temporary duty which took him half way around the world on each trip. He was the senior member of two survey groups appointed in connection with the Military Assistance Pacts signed by the United States with Pakistan and Iraq. Prior to his TDY, General Meyers was Commanding General of Eastern Army Antiaircraft Command. This is the second time General Meyers has commanded the 56th AAA Brigade, his previous tour with the unit having been from February 1951 to January 1954.

LOSSES

Colonel Kenneth J. Woodbury, Executive, will leave in August for assignment as Chief, Military District of New Hampshire.

Lt. Col. Paul A. Harmon, Assistant Executive, leaves during July for Europe.

Major Alvin P. Lobsinger, Brigade S3, departs for Turkey in early July.

Major Irving L. Kanof, Brigade S4, transfers to Europe in August. Major Oliver J. Francis, Assistant S4, will assume the S4 duties.

1st Lt. Joseph W. Lemieux goes to Camp Kilmer via the AG School.

GAINS

Lt. Col. Robert B. Anderson, Brigade S3.

Major John D. Healy, Radar Officer.

1st Lt. Paul E. Joyce, S2.

Colonel Merle R. Thompson comes from the Pentagon to be the Executive.

Colonel Thomas H. Harvey has arrived from SHAPE to take command of the 2nd AAA Group and Fort Niagara, relieving Colonel Maurice P. Shaver, who has departed for Ankara, Turkey.

Lt. Col. John P. Mial has succeeded Major Murray McLeod as CO, 44th AAA Battalion, Fort Niagara, N. Y.

52d AAA BRIGADE

Col. R. S. Spangler, Commanding

By Lt. Col. Theodore W. Lowrie, PIO

Colonel Richard S. Spangler who has commanded the 52d AAA Brigade since June 1953, will leave in July for a new assignment as PMS&T at the University of Hawaii.

Colonel Spangler served recently as Deputy Chief, United States Military Assistance Advisory Group for Iran, in which he was commended for his outstanding performance of duty. He was then assigned to the 52d AAA Brigade in the fall of 1952 where he served as Commander of the 16th AAA Group, and later as the Executive Officer of the Brigade. In June 1953 he took over Command of the 52d AAA Brigade from Brigadier General Tarrant who has been reassigned to the Special Weapons branch at Department of Army Headquarters.

In the competition for the Best Battalion in the Brigade for the month of May, the 66th AAA Battalion under Lt. Col. John C. Wilkerson was designated for this honor.

The Honor Batteries for the month of May were "C" Battery 66th AAA



47th AAA Brigade furnishes Honor Guard as Emperor Haile Selassie arrives at Los Angeles City Hall accompanied by Mayor Norris Poulson

Battalion commanded by Captain John W. Turner and "B" Battery 69th AAA Battalion commanded by 1st Lt. Alfred V. Busicchia.

On 15 May, Colonel Spangler, along with representatives of the Civil Defense, Air Force and Ground Observer Corps, appeared on the TV Program, "An Eye on New York." Colonel Spangler and these representatives of the Air Defense System were interviewed concerning the role each organization plays in protecting Greater New York City.

From the 17th to the 21st of May the 80th AAA Group, the 326th Operations Detachment, Headquarters and "A" and "B" Batteries of the 12th AAA Battalion were at Camp Upton, Long Island for a tactical field exercise.

On 4, 11, 18 August 1954, during the hours of 0830-1200, on-site training will be conducted for approximately 200 West Point Cadets.

Two sites of the 749th AAA Battalion will be used. One hundred Cadets will go to each site. The groups will receive practical work on gunnery procedure, with the remaining time devoted to "County Fair" orientation of AAA Materiel.

Lt. Col. Theodore W. Lowrie, Assistant Executive Officer, has temporarily been assigned as the Brigade S2 as an additional duty, replacing Major Gerard J. Burke who is leaving for the Far East.

Major Derozey C. Cabell has assumed the duties of 80th AAA Group S3, replacing Major Harry Landsman who is going to Turkey. Major Cabell was previously stationed in Heidelberg, Germany.

Captain James B. Bacon, Brigade Radar Officer, left for USAREUR. Captain Albert E. Hill is now the Radar Officer of the Brigade.

17th AAA GROUP

Baltimore, Maryland

Colonel E. A. Chapman, Commanding

Lt. Colonel John D. Underwood recently returned from Alaska to take command of the 89th AAA Battalion. He succeeds Lt. Col. James Kravitz, who is now assigned to duty in Alaska.

Captain Lawrence M. Jones is now the Group Assistant S3. Captain Charles S. Bowyer is S2 and 1st Lt. Robert T. Hayden is Assistant S3. Captain Bowyer replaces Captain James J. Harrison who

is leaving for the Artillery School, Fort Sill, Oklahoma.

M/Sgt. Clarence B. Eisaman and SFC Anderson Vitor of the 35th AAA Battalion were recently awarded Commendation Ribbons with Metal Pendant for Meritorious service while serving with the Armed Forces in Korea. Decorations were presented by Lt. Col. Lewis H. Kirk, Jr., Battalion Commander.

Over 1500 of our civilian neighbors accepted our invitation to visit the on-site positions and see their AA Defense during "Open House" held during the afternoon of Armed Forces Day.

19th AAA GROUP

Colonel Harrison A. Gerhardt, Comd.

Colonel Harrison A. Gerhardt recently assumed command of the 19th AAA Group. His previous assignment had been in the Office of the Secretary of Defense.

Major William T. Colvert reported in May to replace Captain James T. Wortham, S4, who departed for the Advanced Officers Course at Fort Bliss, Texas.

Captain Walter A. Wood 3d, has assumed the duties of the Assistant S3, vice Captain Kincheon H. Bailey, Jr., who departed for EUCOM.

2d Lt. Charles E. Currey, Hq & Hq Btry Commander promoted to 1st Lt., as of 13 May 1954.

On 25 June over a nationwide radio hookup, the "Army Hour" program broadcast an eleven minute recording depicting an alert in a AAA line battery. Utilizing personnel of Battery C, 70th AAA Gun Battalion, the recording proved to be a very realistic and inspiring portrayal of our AAA Defense in action. Plans are now formulated for a worldwide broadcast.

Headquarters 19th AAA Group, together with the 70th AAA Gun Battalion, participated in the ATT held at Fort Meade, Maryland, on June 22 to 25.

Members of the 601st AAA Battalion, Andrews Air Force Base, Lt. Col. E. E. Bellonby, Commanding, held Open House, Saturday, May 15, in observance of Armed Forces Day, and approximately 250 people from the neighboring communities visited the batteries.

The 36th AAA Missile Battalion, Lt. Col. E. R. Gooding, Commanding, was presented the 19th AAA Group "Battalion of the Month" plaque for the month of May 1954.

The past sixty days have seen the battalion gain thirteen new guided missile warrant officers; WOJG S. M. Garner, F. T. Harrell, J. B. Kent, S. Maccarone, H. L. Shelnut, G. M. Vinson, W. W. Warren, H. W. Burney, E. W. Ivey, L. R. Anderson, W. E. Hutchison, B. F. Cooksey and J. E. Armes.

The 71st AAA Battalion is in the process of converting to a Missile Battalion.

Major Sam L. Davies assumed command of the Battalion. Major Felix G. Millhouse is Executive Officer.

The 14th AAA Gun Battalion received the "Battalion of the Month" plaque for the month of April. This makes four of the past six months.

Major William H. Sprigg assumed command of the 14th Battalion vice Lt. Col. Tom B. Strother who was transferred to Europe. Captain Dupont M. Copp, S3, and Captain John M. Jennings, CO of Battery "C" are departing for the Advanced Artillery School.

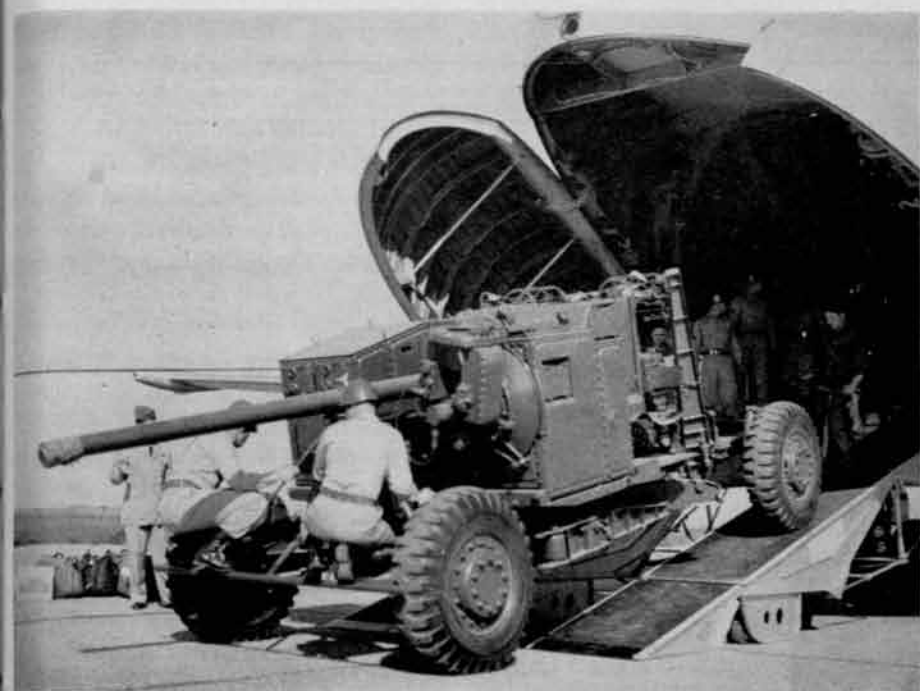
CENTRAL ARMY AA COMMAND

Colonel Donald J. Bailey, Commanding

Armed Forces Day in the Greater Kansas City Area was combined on May the 15th with the official opening of Grandview Air Force Base and celebrated in great fashion. More than 50,000 enthusiastic visitors came to view the smart exhibits and lively demonstrations. And among the most popular offerings on the base were those of the Army AA Command displaying the Skysweeper, the Nike and allied equipment.

531st AAA Battalion

Lt. Col. Phillip J. Gundlach, CO 531st AAA Battalion, sent down an 18 man composite crew under Lt. Oliver H. Dashiell manning the Skysweeper, the AN/TPS-1D and allied equipment. Crew and equipment were flown down from Ellsworth AF Base, South Dakota, in a Strategic Air Command C-124 "Globemaster." With its 60,000 pound capacity it could have brought another gun and crew. On the base this well trained crew at intervals during the day formed in back of their equipment and then double timed to their posts and demonstrated battle drill. The superb manner in which they tracked and simulated action against the fast jet fighter-interceptors streaking across the sky won



The Skysweeper being unloaded from the C-124 "Globemaster"

the plaudits of the visitors. And the smart appearance was just as outstanding as the smart performance. Colonel Bailey received continual compliment from the visitors on the soldierly demonstration of the 531st.

495th AAA Battalion

The Nike and a small crew under WOJG Henry Plock of the 495th Missile Bn were flown up from Fort Bliss in two C-82 "Flying Boxcars." For the exhibit the Nike was roped off from close scrutiny, but Mr. Plock and his men were kept busy answering questions. The crew and equipment were flown to Sioux City, Iowa for a repeat performance on the next day at the Armed Forces Day celebration there. Incident to the Nike exhibit Brig. Gen. H. N. Toftoy shipped from Redstone Arsenal a model guided missile and rocket display with excellent photographic coverage of the Nike and other missiles. This was displayed in a tent and inspected freely by the visitors.

5th AAA GROUP

Col. H. G. Haskell, Comd.

By Capt. Lester B. Leigh, PIO

Brigadier General James G. Devine, Commanding General, Western Army Antiaircraft Command, recently inspected units of the Group accompanied by Colonel Edward B. Hempstead, Com-

manding the 31st AAA Brigade and Colonel Harold G. Haskell, the Group Commander.

The 31st AAA Brigade award for the "Best Gun Platoon" for the month of May 1954 was presented to Battery B, 501st AAA Gun Bn by Colonel Haskell.

Major Gale A. Watson, formerly Group S3 returned from Command and General Staff College upon successful completion of the course to become Executive Officer of the 501st AAA Gun Battalion.

Colonel Harold G. Haskell will leave

about 1 September to his new duty in the G3 Section at the Pentagon. Colonel Haskell is expected to be replaced as Group Commander by Colonel William H. Vail, Jr. who returns from the European Command.

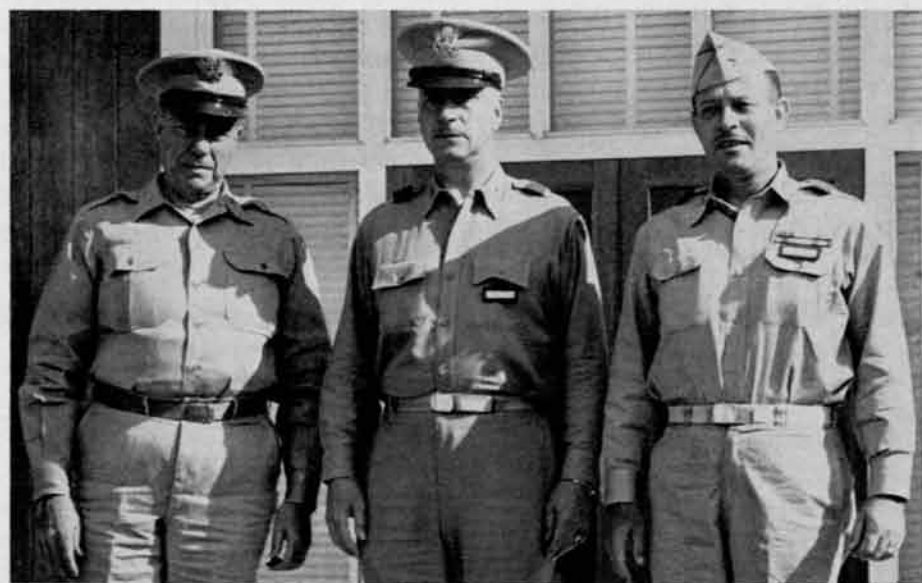
Recently promoted Major Jack Young, formerly Assistant S3, returned from Fort Bliss, where he completed a specialized guided missile course, and has been transferred to the 83rd AAA Battalion to assume the duties of S3.

The Group Headquarters staff includes Lt. Col. Gersen L. Kushner, Executive; Major Donn M. McCann, S3; Major Lawrence J. Burger, S4; Captain Eugene E. Powers, S1; Captain Lester B. Leigh, S2; Captain Robert E. DeWeese, Radar Officer; 1st Lt. Troy D. Hopson, Commo; Captain Dean C. Fellows, Project Officer; and Captain Francis E. Mendenhall, Assistant S3.

42nd AAA BATTALION SP

In an impressive redesignation ceremony held in Nellingen, Germany on 25 May, 1954, the former 899th AAA Battalion, 28th Infantry Division became the 42nd AAA Battalion, 9th Infantry Division.

The 42nd has been commanded by Lt. Col. John E. Arthur, Jr. since September 1953. Major William A. Gresham is the Executive; Captain George Kaiser, S1; Captain Francis G. Bolke, S2; Captain Arthur Fikentscher, S3; Captain Wellington Jones, Asst. S3; and Captain Robert B. Burgert, S4; Captain Orville



Brig. Gen. James G. Devine, WESTARACOM Commander, Col. E. B. Hempstead, 31st AAA Brigade, and Col. H. G. Haskell inspect the 5th AAA Group.



Colonel Harold G. Haskell, CO 5th AAA Group, presents the 31st AAA Brigade Award for the best Gun Platoon to SFC Ernest B. Robinson, Gun Platoon Sergeant, Battery B, 518th AAA Bn. Leading the formation: 2nd Lt. H. M. Routh, Battery Commander, 2nd Lt. T. F. Sandstrom, and 1st Sgt. C. F. Hull. Lt. Col. D. C. Sherrets, Battalion Commander, looks on.

Lasley, Bn. Motor Officer; and 1st Lt. Thomas Casso is Commo Officer.

Commanding Batteries A, B, C, and D are Captains William Corley, Harry Tholen, Gregg Breitegan and John J. McColpin.

The battalion is proud of its fine record in the maintenance and operation of all its equipment. During its last Division Command Maintenance Inspection the unit attained the highest battalion score in the Division.

The 42nd also set a new Division record in the Signal phase, with each battery score 97 or higher.

On the extra-curricular side of the ledger the 42nd teams placed first and second in Division Artillery .22 caliber rifle matches, while teams from Headquarters Battery and Baker Battery won the Div Arty softball championship and basketball title, respectively.

Three out of the five men on the Div Arty Pistol team are from the 42nd and five out of the Division Artillery baseball nine are battalion men.

40th AAA BRIGADE

Brig. Gen. E. F. Cardwell, Commanding
By Major John R. Walker, PIO

June and July turned out to be "Sayonara" months for the staffs of 40th AAA Brigade and Far East AAA Specialist School. Departures included Major Robert H. McCauley to C&GS, Fort Leavenworth; Major John L. Stripling to the Staff and Faculty at Fort Bliss; Major

Thomas H. Sayes to the Advanced Course at the Artillery School; Captain Albert M. Thayer to the Electronics Evaluation Group, Washington, D. C.

Despite heavy losses of officer and enlisted instructors, the Little Fort Bliss of the Far East will soon begin teaching Skysweeper and M33 Fire Control Systems. Captain William J. Reidy joined the faculty recently.

Other additions and changes are: Major John R. Walker, Jr., formerly Executive Officer at Toyoumi Firing Range, has replaced Major Sayes as Brigade S2 and PIO. Brigadier General Eugene F. Cardwell, the brigade commander, has chosen 1st Lt. Frank E. Hamilton as his Aide-de-Camp.

Units of the brigade will soon be filmed in their tactical positions and at the various firing ranges to illustrate U.S. troops in the air defense system of Japan. The Signal Corps is doing the job with the assistance of unit PIOs. General Cardwell will make the opening remarks. The film will be used in various ways back in the ZI, including television presentation.

398th AAA AW BN.

Lt. Col. F. J. Pallister, Commanding

The 398th AAA AW Battalion was chosen as the best marching battalion in the recent review, marking the activation of the 55th AAA Brigade (formerly the 44th AAA Brigade Prov.). The reviewing party included Lieutenant General

Samuel E. Anderson, Fifth Air Force Brigadier General Dwight E. Beach, Eighth Army Artillery Officer; and Colonel Charles B. Duff, 55th AAA Brigade.

In the recent Brigade Command Inspection the Battalion received an excellent rating. The 398th is part of the 10th AAA Group in defense of a large air base.

The 398th staff includes Major Delbert O. Carpenter, executive; Major Les J. Hock, S3; Captain Louis A. Langevin, Chaplain; 1st Lt. John S. Cooper, S2; 1st Lt. Daniel B. Flemming, S1; 1st Lt. Marvin L. Becker, S4; 1st Lt. Joseph M. Holihen, Motor Officer; 2nd Lt. Wilmer O. Gray, Radar and Communications; 2d Lt. John C. Sollars, I & E Officer.

Battery B, commanded by 1st Lt. Sammy D. Myers, has won the Best Battery Award for the past three inspections. Other Battery Commanders, giving B Battery keen competition, are 1st Lt. James S. Pettit, A; 1st Lt. Royal C. Smith, C; 1st Lt. Donald H. Smith, Jr., D and 1st Lt. Fred Goldman, Hq. Battery.

Captains Elmer J. Coffey and Owen F. Doherty and Lieutenants James B. Gillen and Philip G. Broeckel have recently returned to the States.

7th AAA GROUP

Lt. Col. Chesley F. Durgin, Comd.

The 7th AAA Group was activated on 1 May, 1954, to take over the duties and the personnel of the former 41st AAA Group (Provisional). Upon activation, the following assignments were made: Lt. Col. Chesley F. Durgin as the Commanding Officer; Lt. Col. Woodrow L. Nelson, Executive; Major Harry E. Bock, Jr., S2 and S3; Capt. Jesse N. Worsham, TI&E Officer; Lt. Bernard E. Reiter, Assistant S3; Lt. Donald J. Grail, A&R Officer; Lt. Ralph M. Frusan, Headquarters Battery Commander; and CWO Russell E. Faupel, S1 and Personnel. In addition to the AAA defense of priority targets, the Group composed of the 508th AAA Det (Opns), 68th AAA Gun Bn., 865th AAA Bn. (AW) (SP), and the 933d AAA Bn. (AW) (Mbl), has trained many Republic of Korea Army Soldiers who have been attached to the Battalions as KATUSA personnel. In addition, the Group has recently completed a fourteen week training program for the 1st Republic of Korea Army AAA

Battalion to be activated. The 865th AAA Bn. (AW) (SP) was the sponsor Battalion and exercised direct control and responsibility in all training matters. The successful completion of the ROKA training program was culminated by a 1200 troop review held in Seoul on 26 May, 1954. Troops of the Group, as well as the entire ROKA Battalion, passed in review before Lieutenant General Bruce C. Clarke, Deputy Eighth United States Army Commander; Brigadier General Kim Kae Won, Deputy Artillery Officer, Republic of Korea Army, and Colonel Charles B. Duff, Commanding Officer, 55th Antiaircraft Artillery Brigade.

Recent losses include Lt. Col. Bock, who was promoted and transferred to the 29th AAA Group, and Capt. Worsham, who returned to CONUS. Maj. William R. Bullard joined the Group as S3 on 4 June 1954.

Recent Changes

Lieut. Colonel Durgin transferred to FECOM. Lieut. Colonel Raymon C. Ball, Commanding 7th AAA Group. Maj. Fred R. Whitehead, Commanding 865th AAA Bn (SP). Maj. Wm. R. Bullard, Jr., Commanding 933rd AAA AW Bn.

68th AAA GROUP

Col. George F. Pierce, Commanding

By Captain Robert L. Hogan

The 68th AAA Group is stationed at Fort Richardson, Alaska, near the city of Anchorage. There it functions in close teamwork with and under the operational control of the 10th Air Division (Defense) in the defense of Elmendorf AF Base.

The Group includes the 500th Detachment (Opns), the 96th AAA Gun Battalion and the 867th AAA AW Battalion. Recently all units participated with the Air Division in "Operation NORTH STAR."

A great many changes have been made recently in the key personnel. Colonel William B. Hawthorne, leaving for New York City, has been relieved by Colonel Pierce, whose last station was Fort Monroe, Va. The new Group Executive, Lt. Col. Noyes Weltmer, Jr., replaced Lt. Col. Robert D. Harlan, who took command of the 867th. Lt. Col. William R. Parr, former commander of the 867th, left for duty in the Pentagon.

The 96th AAA Battalion is commanded by Lt. Col. Calvin M. Pentecost. Colonel R. W. Hood, former commander, has also gone to duty in the Pentagon. Captain James D. Starkey commands the 500th Detachment, having relieved Major Charles O. May, Jr., who left for duty with G3 in WESTARACOM.

Major William J. Fling, S4, leaves for Hq. Fifth Army in July; Major Alfred H. Fierke, S2, for the 17th AAA Group; Major Bernard A. Gilman, for USAR duty in Cleveland, Ohio; Captain Lloyd W. Dull, Radar Officer, goes to the Army Language School, Presidio of Monterey, Calif.; and Captain Robert L. Hogan, to Fort Bliss, Texas. Captain Thomas E. Brown has joined the S3 Section from Fort Bliss.

32nd AAA BRIGADE

Colonel Charles H. Blumenfeld, Comd.

Colonel Charles H. Blumenfeld has joined the Brigade from the G4 Division of Hq. USAREUR to take command in July, relieving Colonel Gordon H. Holtermann, who goes to the Army War College.

The Bushey Hall Military Reservation, near London, Brigade Headquarters is gradually becoming a regular post. It now has a modern snack bar, barber shop, PX, clothing store, laundry, postal unit, EM Club, Theatre and motor pool.

Lt. Col. W. D. Ward, who commanded the 60th AAA Battalion, Lakenheath, for almost three years, rotated to the States last month. He was succeeded by Lt. Colonel James L. Davis, Jr., who joined from Camp Chaffee, Arkansas.

A total of sixteen EM from units of the Brigade graduated in May from the Aircraft Recognition Course at Brigstock, the Brigade School Center in the UK. Graduates of this unique course go back to their units where they serve as instructors in aircraft recognition, a highly emphasized phase of the training program for AAA gunners in the Brigade.

The Skysweeper was shown to the British public for the first time in England on Armed Forces Day, by the 39th AAA Battalion at Langham Camp on the North Sea, arousing keen interest.

Just prior to Major J. J. Reid's departure from Brigstock School as the school Commandant in early May to become S3 of the 60th AAA Battalion at Lakenheath, sound Anglo-American Relations



Brig. Gen. D. V. Johnson, G-3, USAREUR, presents Pfc. John A. Williams, 4th AAA Battalion, with the 32nd AAA Brigade rifle championship trophy. Pfc. Williams went on to the USAREUR finals in Germany to win a place on the USAREUR rifle team that will go to compete in the National rifle match finals.

paid dividends. When a member of the Royal Signals Association from nearby Corby visited the school, he noted that the high winds had damaged the school's flagpole. A few days later, the Britisher returned to the school with a new flagpole and equipment needed to install it, which he presented to the school, a gift which the Americans will long treasure.

Brigadier General J. F. Cassidy, Deputy G1, USAREUR, represented the Commander-in-Chief for the annual command inspection of the Brigade conducted by the General and his staff during the period 9-16 June. Other recent distinguished visitors included Major General J. G. Van Houten, G1, USA-



Colonel G. H. Holtermann, 32nd AAA Brigade Commander, presents the Brigade Commander's Annual sports trophy to Lt. Col. W. D. Ward, 60th AAA Battalion. The 4th AAA Battalion was a close runner-up.

REUR, and Brigadier General J. H. Hinrichs, Deputy Chief of Ordnance.

Brigadier General D. V. Johnson, G3, USAREUR, came from Germany early this month to present trophies to the Brigade rifle and pistol championship teams and individuals. The 4th AAA Battalion, Upper Heyford, took first place team and individual honors in both pistol and rifle competitions. 1st Lt. Richard E. Leech, Captain of the first place pistol team took top Brigade honors for individual pistol marksmanship while first place individual honors in the rifle competition went to Pfc John A. Williams. Williams score has earned him a place on the USAREUR rifle team that will go to Fort Benning and later to Camp Perry, Ohio to compete in the National Finals.

Among the recent changes in the 32nd AAA Brigade are: Lt. Col. Raymond J. Conelly, formerly Brigade Adjutant, rotates to the States in July. He has been succeeded by Lt. Col. Edwin O'Connor, formerly CO, 4th AAA Battalion, Upper Heyford.

Lt. Col. Benjamin McCaffery, formerly CO, 92nd AAA Battalion, Brize Norton, has been assigned as Brigade S4. He succeeds Lt. Col. Wilmer R. Behrend, who is rotating to the States for reassignment in July. Lt. Col. Stephen C. Farris succeeded Col. McCaffery as CO, 92nd AAA Battalion.

Scheduled to rotate from the Brigade Planning Section in July to the States for reassignment are Lt. Col. Henry M. Boudinot and Lt. Col. George T. Hanna.

Major John Swerda, who has been CO of the 34th AAA Operations Detachment since the unit arrived in England in early 1951, has rotated to the States, and is succeeded by Capt. Charles R. Northrop.

Major Francis J. Manley arrived from the States in June to become Executive Officer, 39th AAA Battalion, Langham Camp.

Major Leo P. Oliver recently arrived from Germany to become Brigade Maintenance and Supply Officer at Cranwich Camp.

Major Henry W. Andermann, recently promoted, is Headquarters Commandant.

CAMP STEWART, GEORGIA

Brig. Gen. R. W. Mayo, Commanding

Colonel Wm. A. Weddell recently arrived from Fort Bliss to take over as

deputy post commander.

The 13th AAA Group is the only RA AAA unit now in Camp. Colonel J. F. Eason and the Group are busily engaged in coordinating the National Guard and Reserve AAA training.

The North Carolina National Guard units here in June included the:

252nd AAA Group
Colonel K. M. Corbett, Comdg.
130th AAA AW Battalion (SP)
Lt. Col. Wm. Lamont, Jr., Comdg.
150th AAA Gun Battalion
Lt. Col. P. B. Platt, Comdg.
725th AAA AW Battalion
Major J. C. Maulsby, Comdg.

Florida:

227th AAA Group
Col. E. F. Henry, Jr., Comdg.
148th AAA AW Battalion
Lt. Col. N. L. Reynolds, Comdg.
265th AAA AW Battalion
Major D. C. Sheppard, Comdg.
712th AAA Gun Battalion
Major A. A. Moore, Comdg.

The Alabama Guard Units here in July included the:

142nd AA Group
Col. R. M. Hardy, Comdg.
226th AAA Group
Col. N. J. Walton, Comdg.
104th AAA AW Battalion
108th AAA AW Battalion
Lt. Col. R. T. Ervin, Jr., Comdg.
216th AAA AW Battalion
Lt. Col. James N. Brown, Comdg.
278th AAA AW Battalion
Lt. Col. J. T. Hardin, Comdg.
279th AAA AW Battalion
Lt. Col. J. M. Balch, Comdg.
464th AAA AW Battalion
Major Wm. J. Munroe, Comdg.

Colonel L. E. Burgess, commanding the 312th AAA Brigade, led the Reserve units in training. Other major units included:

316th AAA Group
Lt. Col. T. J. Thorne, Comdg.
411th AAA Gun Battalion
Major J. R. Bealle, Comdg.
325th AAA AW Battalion
Lt. Col. J. E. Nash, Comdg.
376th AAA AW Battalion
Major Albert Simmons, Jr., Comdg.
481st AAA AW Battalion
Lt. Col. W. J. Byford, Comdg.

34th AAA BRIGADE

Brig. Gen. F. C. McConnell, Comdg.

By Capt. Wm. J. Murphy, PIO

The year 1954 will create a new record for rotation of officers from the European Theater. Three war-horses of the old Coast Artillery days are among those being retired from USAREUR Headquarters: Brig. Gen. Jack Cassidy (Transportation Corps), Colonel John McComsey and Colonel D. C. Tredennick.

The Brigade Headquarters has experienced an almost complete turnover during the past three months. General McConnell, who arrived in December, is still the Commanding General; Col. J. S. Albergotti, Executive, will depart about 1 October after completing a six months extension; Major J. F. Butler, S1, has been replaced by Major J. E. Schoeller, who came to the brigade from Fort Sheridan, Illinois; Major F. H. Baker is still holding down the S2 slot.

Lt. Col. G. M. Gershon, former commander of the 504th AAA Opns Det, has taken over the S3 job, replacing Lt. Col. C. E. Gushurst, who will attend the next session of the Command and General Staff College. Major J. R. Stutts has been brought in from the 25th Bn to take over as S4 after Lt. Col. L. J. Lesperance was moved up to S4 of Seventh Army Artillery.

Capt. C. M. Murray is assistant S4. Major J. F. Seals, former executive of the 40th Bn has taken over as radar officer from Major J. W. Young, who will attend the Advanced Artillery course at Fort Sill. Capt. H. J. Polichnowski is S3 and Capt. Wm. J. Murphy who joined from the 56th AAA Brigade, is assistant S3. When Major L. F. Ladd departed, the assistant communication officer, Capt. J. F. Bowers took over.

Colonel O. H. Kyster, CO, 8th AAA Group has transferred to the G4 section, Seventh Army. He was replaced by Col. L. J. Hillberg, from Hq, USAREUR.

A brigade testing team has been formed under the command of Lt. Col. J. P. A. Kelly and is busily engaged in administering the Army Training Test to both brigade units and divisional anti-aircraft artillery battalions.

All battalions have completed the first record service practice at the ranges and are beginning on their second go-around.

The 67th AAA Gun Battalion, the first of our units to be equipped with

the M33 fire control system, is aptly applying itself to learning the operation of this modern equipment.

All personnel in brigade are now preparing for the inevitable field exercises and maneuvers which, like clockwork, roll around with the advent of warmer weather. More about this aspect of life in the 34th AAA Brigade in the next issue.

FORT MILES, DELAWARE

July the Fourth marked the beginning of the active summer training at Fort Miles and Bethany Beach, Delaware, for the D. C. National Guard and the Second Army Guard and Reserve AAA units.

260th AAA Group

Major General Wm. R. Abendroth commanded the District Guard troops with Colonel Robert F. Cocklin as his Chief of Staff.

Colonel George V. Selwyn, CO, 260th AAA Group, DCNG, commanded the Antiaircraft camp and firing range at Bethany Beach, Delaware. The major units included the 340th AAA Gun Battalion, Lt. Col. R. T. Bard, commanding, and the 380th AAA Gun Battalion, Lt. Col. Andrew G. Conlyn, commanding.

Aside from the heavy AAA guns firing, a highlight of the two weeks was the massed troop parade at Fort Miles on July 10th honoring Colonel Riley E. McGarraugh, able Fort Miles commander, who retires next month.

District day on July 14th brought the District commissioners and a host of VIP's to the camp to observe the batteries on the firing range and other activities.

2nd Army AAA Reserve

Colonel Armand F. Hoehle, CO, 313th AAA Group of Pittsburgh led the Reserve units into Fort Miles also on July 4th and served as the Provisional Brigade Commander.

Colonel J. M. Welch, 302nd AAA Group of Cincinnati commanded the Ohio troops including the 199th AW Battalion, Cleveland, Major Luke Laughner, commanding; 614th Gun Battalion, Columbus, Lt. Col. F. C. Harold, commanding and the 301st Opns Det, under Capt. J. M. Alexander, Jr.

Colonel Martin D. Meyers, 326th AAA Group of Philadelphia, had in his

group the 457th AW Battalion, Baltimore, under Lt. Col. John Horst, Jr.; 463rd SP Battalion, Philadelphia, under Lt. Col. Jack Orritt; 486th AW Battalion, Richmond, under Lt. Col. Charles C. Edwards; and 304th Opns Det under Major S. J. Steinberg.

Colonel Harry W. Orth, Wilmington, Del., was the Commandant of the AA & GM School. Prominent among the instructors were Colonels M. A. Gross and V. P. Lupinacci and Lt. Col. F. E. Reiber, Pittsburgh; Lt. Colonels J. E. Cook, Washington; Don T. Michael, Cincinnati; M. G. Stroud, Wilmington; Jack Smith, Allentown; and C. W. Mebus, Philadelphia.

With Colonel Hoehle as the reviewing officer and music by the 331st USAR band, the Antiaircraft Reserve also paraded smartly in honor of Colonel McGarraugh on July 10th. For the Reserves Colonel Hoehle presented to Colonel McGarraugh a beautiful plaque commemorating his outstanding contributions to Reserve training at Fort Miles.

LETTERS TO THE EDITOR

To the Editor:

We have read with interest the Atomic Age article in the May-June 1954 issue of the *ANTI-AIRCRAFT JOURNAL*, "Fallacy of 'Massive Retaliation' Threat" by Brig. Gen. Thomas R. Phillips, USA Retired. I certainly hope that all the readers of our Journal take the time to read General Phillips' article carefully.

As you know, the Department of Tactics and Combined Arms here at the School presents instruction on special weapons to various army and artillery courses. We are always faced with the problem of providing "take away" material to the students. We give the students an element table, the *New York Times'* article on Atomic Age, General Bradley's article on Guided Missiles and Atomic Warfare, and one or two other similar articles. We were successful in obtaining the permission of the *Saturday Evening Post* to reproduce General Bradley's article. I think General Phillips' article is just as valuable and I would be more appreciative if we could obtain the Journal's permission to reproduce this article for use as a "hand-out" in the Army Special Weapons Course and

Tank Training

The western area of Camp Stewart's 280,000 acre reservation has taken a new look. For the past 15 years the eastern and central portions of the post have been utilized for training antiaircraft artillerymen while the western reaches remained virtually untouched.

Now this western area is bustling with a new armor activity that could increase the importance of this already important antiaircraft training center. Recently announced plans by Brig. Gen. R. W. Mayo, post commander, call for active Third Army Tank units, Reserve and National Guard, to conduct annual training on this section of Stewart.

A "tent city" complete with post exchange, movies and television has been erected near the tank training site which is about 25 miles from the main cantonment area.

At present the 194th tank battalion is providing instruction for the 710th tank battalion which is a part of the 11th Airborne Div. from Fort Campbell, Ky.

at the Artillery Officers' Advanced Courses.

We have often discussed writing some articles on atomic warfare for the Journal, but we are so deeply involved that we cannot clearly distinguish what is classified and what isn't. This will probably be a difficult problem for some time to come.

I expect to leave here the week-end of 11 July, shortly after Colonel Frank Miter arrives. I understand that Frank will take over my job as Director of the Department of Tactics and Combined Arms. Another item of interest to you is the recent change-over of the responsibility for development and instruction concerning guided missile tactics. This responsibility has been transferred from the Department of Guided Missiles to the Department of Tactics and Combined Arms as of the 20th of June. This, in effect, consolidates all tactics instruction at the School within the one department.

COL. THOMAS W. ACKERT, Director,
Dept. of Tactics and Combined
Arms AA and GM Branch, TAS.

Fort Bliss News

88th Airborne AAA Battalion Demonstration

High-ranking Army officers of Canada and Mexico and a representative of General M. B. Ridgway were among spectators who watched an air-drop of personnel and equipment by the 88th Airborne AAA Battalion and a series of antiaircraft artillery demonstrations on the Fort Bliss ranges, May 27th.

Special guests of Major General S. R. Mickelsen for the exhibition were: Lieutenant General Guy G. Simonds, Chief of the General Staff, Canadian Army, and party; Major General Reinaldo Nuncio Gaona, commander of Juarez, Mexico and party; Brigadier General H. N. Toftoy representing General Ridgway; and members of the El Paso Chamber of Commerce.

One hundred and eighty paratroopers, led by Lt. Col. E. L. Cormier, commander of the 88th, dropped out of the skies above Dona Ana Dry Lake Bed to show a crowd of 12,000 civilian and military spectators how an airborne antiaircraft unit can land in enemy-held territory and set up a defense in a matter of minutes. It was the largest personnel drop ever held at Fort Bliss.

Following their smooth descent, in their new T-10 chutes, men of the 88th Airborne Antiaircraft Battalion from Ft. Campbell, Ky., set up their weapons and made ready to defend their inland "beach head." Landing in the drop zone, a C-122 assault plane brought a jeep and a .50-caliber quadruple-mount machine gun to aid the men in their simulated defense.

The paratroopers were preceded by an Air Force combat control group of fourteen men who jumped to prepare the drop area for incoming troops.

Six C-119 aircraft from the 463rd Troop Carrier Wing at Ardmore, Okla., brought in the men of the 88th Battalion to make their jump. The F-86 Fighters which carried out cover missions over the drop area were from the 366th Fighter Bomber Wing at Alexandria, La.

The Paratroopers' jump, which was open to the public, was followed by a series of antiaircraft firing demonstra-



Paratroopers of the 88th Airborne AAA Battalion during the airdrop at Dona Ana Dry Lake Bed at Fort Bliss, May 27.

tions on the Dona Ana and Hueco ranges. These were sponsored by the Antiaircraft and Guided Missiles Branch of The Artillery School and were attended by Fort Bliss students and guests.

Dramatic illustration of the way an air-ground team can operate in combat was afforded by Strategic Air Command and Tactical Air Support planes working with Army troops in the demonstration at Dona Ana range. Here antiaircraft artillery supported Infantry in a simulated attack which was preceded by air strikes at the "enemy" in front of the assaulting troops.

Firing demonstrations of light, medium and heavy AAA followed the Infantry-support exhibition. Quadruple-mount .50-caliber machine guns, twin .40-mm self-propelled guns and towed .40-mm guns fired against RCAT's. So did the Army's new Skysweeper, a .75-millimeter weapon.

AA guns, both 90-mm and 120-mm, were demonstrated in firing at towed sleeve targets up to ranges of 30,000 feet.

Antiaircraft Artillery and Guided Missile Center

Major changes in the personnel of

the AAA and GM Center have been numerous.

Brig. Gen. Earl W. Heathcote was named to the newly authorized position of Deputy Commanding General.

Col. Roy A. Alford is the new Center G-4, succeeding Lieut. Col. Glenn P. Elliott, now attending a guided missile course in the Antiaircraft and Guided Missiles Branch of The Artillery School. Major Michael Halliday, Inspector General, has been re-assigned to duty in Hawaii.

Col. Edward L. Wilson, Post Quartermaster, has been transferred to the Far East Command, as have Lieut. Col. H. N. Elkins, Finance and Accounting Officer, and Lieut. Col. Robert F. Thornton, Post Chaplain.

Col. Loren T. Jenks replaced Col. Thornton as Post Chaplain, and Lieut. Col. Joseph N. Beaver is the new Finance and Accounting Officer.

Antiaircraft Artillery Replacement Training Center

Five field grade officers were recently assigned to the AAA RTC:

Lt. Col. John Barry Beatson, CO, 9th Battalion; Lt. Col. Theodore William Hover, assistant administrative inspector; Lt. Col. William H. Peterson, Headquarters commandant; Maj. Harry C. Eisenhart, 4th Battalion executive; and Maj. Clinton Thomson, motor officer, Service Battery.

Major Walter K. Sims and Major Joseph M. Puszyński departed for duty in the European Command.

Transfers within RTC included: Maj. Patrick L. Klein from assistant S-3, Headquarters RTC, to executive officer, 5th Battalion, and Maj. John E. Nuwer from assistant S-3, Headquarters RTC, to CO, 1st Battalion.

Army Field Forces Board No. 4

Lt. Col. James R. Dillon is the new head of the Test Group, Test Facilities Section of Board No. 4. He succeeds Lt. Col. Leonard M. Orman, who has been transferred to Aberdeen Proving Ground, Maryland.

Lt. Col. Henry M. Clanton, head of the Heavy AAA Group, AA Service Test Section, has been transferred to the Far East. New head of the Heavy AAA Group is Maj. Obaldo Garcia.

1st Guided Missile Brigade

Personnel changes in the 1st Guided Missile Brigade included four field officer losses when package commanders departed for new duty stations in the United States. These four officers, all from the 1st GM Group, were: Lt. Col. Antonio H. Manguso, Lt. Col. Lyman D. Burkett, Maj. Sam L. Davies, and Maj. Austin J. Canning, Jr.

Gains reported by the 1st Group were: Lt. Col. John J. Guy, assistant executive; Maj. Edward J. Rumpf, assistant S-3; and Maj. Harold B. Sloan, Nike package commander in the Training Detachment.

In the 2nd GM Group Headquarters, Maj. John T. Elliott, S-4, was transferred to the 247th FA Battalion, while Maj. Thomas E. Selby assumed duties as assistant S-3. He was transferred from the 259th FA Battalion.

The 259th FA Battalion has a new executive, Maj. James B. Campbell. He replaced Maj. Selby.

Lt. Col. Richard Walmer of the 5th Ordnance Battalion came to the Battalion by transfer from Headquarters and Headquarters Detachment, 9th Ordnance Battalion.

6th AAA Group

Colonel Arthur A. Adams, 6th AAA Group commander, has received orders for duty in the Far East.

Colonel Harry B. Cooper, Jr., has joined as assistant Group commander.

Major William J. Johnson has reported to the 546th AAA Battalion.

Major James Cobb, currently serving with MAAG in Formosa, has been assigned to 548th AAA Battalion to join in mid-September.

246th FA Battalion

Participating in the Army's "Exercise Flashburn," April 26-May 6, the 246th FA Missile Battalion of Fort Bliss became the first surface-to-surface guided missile unit to take part in a full scale atomic field maneuver.

Manned by troops of the 246th, Corporal missiles from Fort Bliss demonstrated the value of long-range weapons in delivering atomic destruction far behind the enemy lines.

Lieutenant Colonel Paul Gray, Jr.,



USMA Cadets study the Corporal during their visit to Fort Bliss, June 19-23

is commanding officer of the Battalion. Major Kenneth V. Deans is executive officer.

USMA Cadets

Instruction on surface-to-air and surface-to-surface missiles, as well as on guided missile propulsion and guidance systems highlighted two days of intensive training for 445 United States Military Academy cadets during their summer visit to Fort Bliss.

Arriving on Saturday, June 19, the Class of 1955 began its training program on Monday, June 21. Lectures and demonstrations on guided missile subjects and observance of guided missile training in the 1st Guided Missile Brigade occupied the day.

The second day of training was devoted to witnessing light, medium and heavy antiaircraft artillery firing on the Fort Bliss ranges and to further guided missile training. Inclement weather prevented the demonstration at White Sands.

The cadets found a full program of recreation and entertainment available during their off-duty hours, including a trip to Calsbad Caverns, a trip to Juarez, Mexico, to see the bullfights, dances at the Fort Bliss Officers' Club, and a varied sports schedule.

Antiaircraft and Guided Missiles Branch The Artillery School

Lt. Col. Reuben W. Mundy has been re-assigned to duty as Assistant Coordinator of Instruction, and Lt. Col. John B. Parrott is now Chief of Plans Section.

Newcomers to the Coordination of Instruction Department were: Major James B. Teer, Operations Officer, and Major James G. Barr, Plans Officer. Major Barr is a transfer from Nonresident Instruction Department, where he was succeeded by Major Keith G. Bender as training publications officer.

Lt. Col. Raymond J. Belardi, formerly Director of General Subjects Department, has been transferred to the 59th AAA AW Battalion as commanding officer.

Newcomer to the Department of Guided Missiles is Maj. Fred R. Brownyard who has been assigned to duty in the Tactics and Gunnery Section.

The Department of Gunnery and Matériel has lost Maj. William G. Trigg transferred to the European Command.

Lt. Col. Kenneth E. Pell was assigned to duty with the medium and heavy antiaircraft artillery and guided missile section of the Tactics and Combined Arms Department of the School.

Awards To Bliss Personnel

DISTINGUISHED FLYING CROSS

Lt. Robert B. Sumner

1ST AND 2ND OAK LEAF CLUSTERS TO AIR MEDAL

Lt. Robert B. Sumner

2ND OAK LEAF CLUSTER TO BRONZE STAR MEDAL

Capt. Robert W. Martin

BRONZE STAR MEDAL

Col. Fredrick Van Atta

Col. Harry B. Cooper, Jr.

Capt. William M. Davis, Jr.

Capt. Garth M. Crosby

Capt. John F. Kearns

Lt. Carroll W. Smith

Lt. Tommy D. Marlatt

Lt. James L. Harrison

Lt. Ernest A. Tietke

M/Sgt. Orville J. Johnston

M/Sgt. Charles E. Bunn, Jr.

M/Sgt. Richard G. McMurphy

SFC Carter H. Wright

SFC Lonnie F. Mills

SFC Jackie R. Turner

Sgt. Eddie L. Harmes

Sgt. Darrell D. Ranum

COMMENDATION RIBBON WITH METAL PENDANT

M/Sgt. Norman G. Brown

M/Sgt. Alvara P. Moraga

SFC Donald B. Littrell

SFC Booker T. Beckwith

SFC William N. Laack

SFC Wesley L. Linthicum

SFC Donald J. Saindon

Electronics Men Promoted

Typical of the rapid promotion today in the Artillery for men in the fields of electronics and guided missiles is that of Warrant Officer Junior Grade Robert C. Collins recently from the grade of corporal.

Ten months earlier Cpl. Collins entered the AA & GM Branch of The Artillery School at Fort Bliss to take a guided missile specialist course. He had had no previous experience in electronics, but he did have a high school education and he was a worker. Upon graduation he was assigned to duty in the Electronics Department. Meanwhile vacancies were being established for more warrant officers in the guided missile field. He promptly went to work on his own time to prepare for the required



WOJG Robert C. Collins starts rapid promotion as he receives his new bars from Colonel Arthur Cramer, Director, Electronics Department. Lt. Col. Henry P. Morse, Assistant Director, looks on.

examination. He passed the examinations successfully last month, and has now received the coveted promotion.

A large number of such promotions are being made among electronics experts now assigned to the guided missile battalions. For many of them that merely marks a fine start. The field offers splendid opportunities for higher promotion in warrant officer and commissioned officer grades.

AAA ROTC Summer Camp Opens

The 1954 AAA ROTC Summer Camp opened at Fort Bliss on June 19, with 757 cadets in attendance.

A formal opening assembly was held

on June 21, at which Major General S. R. Mickelsen, Commanding General of Fort Bliss and ROTC Camp Commander, welcomed the future officers to the post.

After the General's welcome address, Colonel Robert T. Connor, Deputy Camp Commander, outlined to the cadets the training schedule for the summer camp and emphasized its great scope.

The cadets' training began the same day with a trip to the field, where they were instructed in defense against chemical, biological, and radiological warfare attack.

In the second week the cadets started their artillery training in the Fort Bliss gun parks and the following week moved to the firing ranges to fire the AAA guns.



ROTC cadets from Battery F take gas mask drill during summer training at Fort Bliss.

Armed Forces Day

Two simulated A-bomb explosions, the Army's new Nike-guided missile, and the Skysweeper automatic cannon, were stellar attractions, May 15, in the largest Armed Forces Day exhibit ever held at Fort Bliss. Fifteen thousand spectators, it was estimated, thronged to Noel Field to visit 26 different displays of the country's "Power for Peace."

Explosion of a mock A-bomb, of the type used in training troops, sent a "mushroom" cloud high into the sky, and brought a momentary hush to the sightseers.

The sleek white Nike, displayed with its launcher, was the focus of popular attention, viewed in its guarded and roped-off area. The older AAA weapons from the quad .50-caliber machine guns to the 120-millimeter heavy guns also drew attention. Favorite in this division was the new Skysweeper, combining radar, computer and gun on one carriage.

Army buses, running on a half-hour schedule, carried visitors from the exhibits on Noel Field to open house in the new permanent barracks area, chapels, and the troop train stationed on a Bliss railroad siding.

summer camp at Camp Wellfleet, Mass., 22 August to 5 September.

Safety Firing Switch for Quad .50 M.G. Mount

146th AAA AW Bn., Michigan NG

Those who have had safety trouble in target practice on the Quad .50 M.G. Mount with an improvised wire or cord attached to the firing switch will be glad to hear that AFF Board No. 4 has recommended the use of a standard safety pendant switch to correct the trouble. This electrical switch is suitable for all automatic weapons and for the Skysweeper. The word has been received that the switch has been approved and that soon the switch and an adaptor will be made available for the Quad .50 M.G. Mounts.

One of the first to suggest this correction was M/Sgt. Maynard E. Doxey, now Sgt. Advisor with the 146th AAA AW Bn., MNG, Detroit, Michigan. In 1953, while serving in his wartime reserve grade as Captain with Battery D, 5th AAA AW Battalion, Doxey designed and used such switches in target practice in Germany and submitted for approval the plans for the same.

Recent Assignments

MAJOR GENERAL

Hewett, Hobart, to Western Army AAA Command.

BRIGADIER GENERAL

Case, Homer, to Walter Reed Army Hospital.

COLONELS

Adams, Arthur A., to USAFFE.
Albergotti, J. A., to AA&GM Br., TAS-Bliss.
Alfrey, John, to PMS&T, Tex. Western Col.
Anderson, C. A., to Fla. Mil. Dist., Jacksonville, Fla.
Bane, J. G., to OCAFF, Ft. Monroe, Va.
Bowers, A. T., to Ft. Totten, N. Y.
Cole, Paul W., retired 31 May 1954.
Comstock, R. H., to ROTC, Cornell Univ., N. Y.
Conell, J. C., to USAREUR.
Couch, F. V. B., to USAFFE.
Duff, C. B., to S&F Indus. Co., Ft. McNair.
Edwards, P. W., to Fla. Mil. Dist., Jacksonville, Fla.
Ellis, W. F., to TAGO-CMD, Pentagon.
Farnsworth, E. E., to OCAFF, Ft. Monroe.
Gerhardt, H. A., to 19th AAA Gp, Wash., D. C.
Gibbs, G. G., retired 31 July 1954.
Greenlee, H. R., Jr., to 35th Brig., Ft. Meade.
Hanson, C. C., to USAFFE.

News and Comment

General Sage Promoted

Major General Charles G. Sage, Adjutant General of the State of New Mexico and commander of the 111th AAA Brigade, was recently promoted to the grade indicated.



General Sage's army service dates back to World War I, when he enlisted in the ranks and won his commission in the Field Artillery.

Serving in the Guard between the Wars, he climbed to command of the 111th Cavalry, NMNG. With his regiment converted to Antiaircraft in 1940, he took the famous 200th Coast Artillery (AA) to the Philippines late that year

in time to lead it through that campaign until the surrender on Bataan. Following his release as a POW, he was promoted to brigadier general in 1946 and later relieved from active duty in 1947. Soon thereafter he was appointed brigadier general to command the 211th AAA Brigade, NMNG. During the last several years General Sage has been a prominent national leader in National Guard Affairs. He also serves now as the National Guard member of the Executive Council of the U. S. Antiaircraft Association.

War Decorations: DSM, BSM, PH; Presidential Unit Citation with two clusters.

General Drowne Retires

Brigadier General H. Russell Drowne, former commander of the 300th AAA Brigade, USAR, New York City, and the USAR member of the Executive Council, U. S. Antiaircraft Association, recently transferred to the Retired Reserve on his own application after more than 35 years service.

Colonel John S. Mayer, 305th AAA Group, New York City, has been elected to succeed General Drowne on the Association Executive Council.

Colonel Frank L. Lazarus succeeded General Drowne in command of the 300th AAA Brigade. The Brigade and its subordinate units in New York go to

Harwell, M. H., to Carlisle Bks., Penna.
 Haskell, H. G., to G3, Pentagon.
 Hennessy, H. P., to Fort Myer, Va.
 Hill, C. W., to USAREUR.
 Lerner, T. M., to 22nd AAA Gp., Chicago.
 Linderer, L. W., to 82nd Abn. Div./Arty.
 Martin, M. J., retired 31 May 1954.
 Martin, R. J., to ROTC, Univ. of Cincinnati.
 McComsey, J. A., to S&F, West Point, N. Y.
 McCormick, G. E., to USAFFE.
 Mellnik, S. M., to 18th AAA Group.
 Murray, D. B., to 80th AAA Group.
 Peca, P. S., to USARCARIB.
 Pryor, R. H., to AA&GM Br., TAS-Bliss.
 Rehkop, Russell, to USAREUR.
 Rothgeb, C. E., retired 30 June 1954.
 Rumph, R. W., to USAREUR.
 Samuels, Andrew, Jr., to MAAG, Saudi Arabia.
 Shaver, M. P., to JAMMAT, Ankara, Turkey.
 Shunk, Peter W., retired 31 July 1954.
 Thompson, M. H., to Hq., 6th Army, Presidio of San Francisco, Calif.
 Thompson, E. A., to USAR, Adv. Gp., DuBois, Pa.
 Thompson, M. R., to 56th AAA Brigade.
 Utke, R. O., to Field Office, OTIG, Detroit.
 Vail, Wm. H., Jr., to 5th AAA Gp., Cp. Hanford.
 Vickers, L. T., to Jt. Air Def. Bd., Ent AFB.
 Ward, E. R. C., to RTC, Ft. Bliss.
 Wrean, J. T., to USAREUR.

LIEUTENANT COLONELS

Abbott, A. E., to USAFFE.
 Alba, B. M., to USAREUR.
 Andrews, C. L., to Hq., 3rd Army.
 Arnold, S. M., to USAFFE.
 Banks, C. M., to USAREUR.
 Barber, J. T., retired 31 May 1954.
 Baron, A. S., to Pres. of San Francisco.
 Bates, J. L., to USAR Adv. Gp., Denver.
 Bendler, F. D., Jr., to USAREUR.
 Bigelow, A. E., to OCAFF, Ft. Monroe.
 Blue, D. L., to 563rd FA Bn., Ft. Bragg.
 Bolton, J. C., to USAREUR.
 Bradley, F. X., to USAREUR.
 Brassel, A. L., to USAFFE.
 Brown, B. O., to USAREUR.
 Burt, R. E., to 5th Armd. Div., Cp. Chaffee.
 Cassidy, R. T., to WESTARAAC, Ft. Baker.
 Chittenden, A. O., retired 30 June 1954.
 Clanton, Henry M., to USAFFE.
 Cochran, J. M., to DA Comptroller, Pent.
 Conelly, R. J., to 8th Inf. Div., Cp. Carson.
 Cooke, L. G., to USAFFE.
 Cushing, C. B., Jr., to USAREUR.
 Douglas, M. B., to ARAAC, Ent. AFB, Colo.
 Ellis, B. J., to 514th AAA Bn., Ft. Banks.
 Evans, J. T., to 79th AAA Bn, Chicago.
 Fernstrom, C. H., to USAREUR.
 Fitzgerald, E. W., to OCAFF, Ft. Monroe.
 Forman, R. C., to 602nd AAA Battalion.
 Fox, E. W., Jr., to USAREUR.
 Frith, R. F., to Log. Comd., Ft. Bragg.
 Fuller, C. W., to AAARTC, Ft. Bliss, Tex.
 Graham, H. E., to 5th Armd. Div., Cp. Chaffee.
 Grendlach, P. J., to USAFFE.
 Guth, H. T., to Army Sect., MAAG, Formosa.
 Hale, H. R., to USAFFE.
 Hall, R. E., to USAFFE.
 Harmon, P. A., to USAREUR.
 Harvey, A. W., to ROTC JSTC, Jacksonville.

Hart, J. E., to USAFFE.
 Hickey, T. J., to Hq., 4th Army, Ft. Sam Houston, Texas.
 Hutchinson, G. W., to USAFFE.
 Jackson, J. M., to XVIII Corps, Ft. Bragg.
 Janowski, R. A., to 18th AAA Gp., Broughton.
 Jeffries, J. C., Jr., to USAFFE.
 Johnson, B. H., to Hq., 2nd Army, Ft. Meade.
 Kelley, S. R., to 45th AAA Brigade, Belleville, Michigan.
 Kirby, L. M., to OCoS, Washington, D. C.
 Kravits, James, to USARAL.
 Krisman, M. J., to 82nd Abn. Div., Ft. Bragg.
 Kuziv, Michael, to 38th AAA Bn., Ft. Story, Va.
 Lagasse, F. J., to USAREUR.
 Leek, C. B., to USAREUR.
 Lewis, J. L., to USMA, West Point, N. Y.
 Lonsinger, R. W., to Hq., 2nd Army, Ft. Meade.
 Lowrie, T. W., Sr., to USAREUR.
 Malone, A. G., to Hq., 3rd Army, Ft. McPherson.
 May, Samuel, to USAREUR.
 Maynard, J. B., Jr., to 531st AAA Bn., S. D.
 McCracken, R. J., to 14th AAA Bn., Ft. Myer.
 McFadden, D. B., Jr., to AFF Bd. No. 4-Bliss.
 McGrath, D. B., to Ariz. NG Instr Gp.-Mesa.
 McLaughlin, H. H., Jr., to USARAL.
 Meadham, J. R., to USAREUR.
 Meisner, A. E., to USAREUR.
 Moyer, M. G., to USAREUR.
 Myers, G. E., to OACoS, G1, Pentagon.
 Olhausen, J. H., to 540th FA Bn., Ft. Bragg.
 O'Reilly, C. A., to USAREUR.
 Paciorek, S. J., to USAREUR.
 Page, B. N., to 606th AAA Bn., Grand Island, New York.
 Parker, J. C., to S&E, TAS, Ft. Bliss.
 Perry, B. W., to USAREUR.
 Perryman, T. D., to TAC, Ft. Sill, Okla.
 Pidgeon, J. J., to USAREUR.
 Pratt, F. E., to USAREUR.
 Quist, F. F., to USAREUR.
 Redd, L. B., to USAREUR.
 Redd, H. M., to USAREUR.
 Roy, J. W., to USA Element, Allied Forces, Southern Europe, Naples, Italy.
 Schuman, F. L., to Hq., 5th Army, Chicago.
 Shugart, R. T., to USAREUR.
 Stewart, C. W., to USAREUR.
 Stewart, J. C., to OCAFF, Ft. Monroe.
 Tawes, J. P., to AFF Bd. No. 4, Ft. Bliss.
 Wainhouse, E. R., to Office, Chief of Psy-War, Washington, D. C.
 Wahlgron, N. C., to USAREUR.
 Wantuck, L. G., to USAREUR.
 Ward, L. P., to OACoS, G4, Pentagon.
 Werner, F. E., to USAREUR.
 Wilkins, G. R., to USAREUR.

MAJORS

Aleef, K. G., to USAREUR.
 Anderson, G. K., to Cours Pratique de Tiv, anti-aereen. Nîmes, Fr.
 Arnold, E. D., to USAREUR.
 Bishop, R. C., to USAFFE.
 Bjorkland, F. N., to USAREUR.
 Bly, S. R., to USAREUR.
 Boaz, R. A., to Army Sect., US Forces, Azores.
 Boiles, D. J., to Adv. Cse., Fort Sill, Okla.
 Breitenbach, F. P., to 12th AAA Bn., Miller Field, S. I., N. Y.
 Carpenter, R. R., to USAREUR.

Carroll, H. J., to USAFFE.
 Conerly, U. E., to 758th FA Bn., Ft. Bragg.
 Cornwell, B. R., to AA&GM Ctr., Ft. Bliss.
 Crews, D. J., to USAR Adv. Gp., Rock Island, Illinois.
 Default, R. C., to Adv. Cse., Ft. Sill, Okla.
 Duke, T. A., Jr., to USARCARIB.
 Elliott, D. E., to 526th AAA Msl. Bn., Fort Hancock, N. J.
 Fox, Wm. M., to Ar. Adv. Gp., Pittsburgh, Pa.
 Gadd, R. G., to Hq., 1st Army, N. Y.
 Gallant, F. J., to USAREUR.
 Gardner, R. V., to USAREUR.
 Genero, P. P., to Hq., ARAAC, Ent AFB, Colo.
 Hamilton, R. B., to Hq., ARAACOM, Ent AFB.
 Hartwell, V. J., to USAFFE.
 Jacobs, H. J., to 1st GM Brig., Ft. Bliss.
 Kanof, I. L., to USAREUR.
 Kenny, Wm. D., to 326th AAA Det., Ft. Totten.
 King, Randolph, to 2216th ASU, LaCarne, O.
 Kolesar, A. M., to 531st AAA Bn., S. Dak.
 Ladner, G. J., to 31st Inf. Div., Cp. Carson.
 Kehmann, K. W., to 22nd AAA Gp., Chicago.
 Lindsey, R. E., to AA&GM Ctr., Ft. Bliss.
 Malsam, W. R., to 30th AAA Gp., Ft. Barry.
 Mann, J. H., to USARAL.
 Marye, R. V., Jr., to USAREUR.
 McKinney, W. P., Jr., to USAREUR.
 Meyer, G. C., Jr., to AAARTC, Ft. Bliss.
 Miss, D. C., to USAREUR.
 Moore, H. F., to WARAAC, Ft. Baker.
 Morles, R. V., to USARAL.
 Penrod, C. M., to USAREUR.
 Peterson, T. W., to USARAL.
 Plant, O. M., G-2, Pentagon.
 Powers, R. M., to USAREUR.
 Price, T. A., Jr., to ROTC, Univ. of Chattanooga, Tenn.
 Ricco, J. A., to Hq., 1st Army, N. Y.
 Rogers, T. O., to USAR Adv. Gp., Knoxville.
 Smith, L. A., to USAREUR.
 Speshock, E. J., to 749th AAA Bn., N. J.
 Sprigg, W. H., to USAREUR.
 Swick, L. B., to USAREUR.
 Trussell, A. R., to USAREUR.
 Twining, E. E., to USAREUR.
 Vaughn, J. E., to AA&GM Br., TAS, Ft. Bliss.
 Waters, F. D., to Det. 3, 6400 ASU, Portland, Oregon.
 Weeks, R. L., to USAREUR.
 Wood, Franklin, to Co. A, Stu. Regt., 8622 AAAU, Adv. Course, Ft. Devens, Mass.
 Youngberg, Wm. A., to 1st GM Brig.-Bliss.

TO ASSOCIATE OFFICERS COURSE, C&GSC

Lieut. Colonels:

Wilmer R. Behrend
 Joseph H. Doyle
 Howard F. Ewing
 Richard M. Gardner
 Leo F. Horowicz
 Arthur G. May
 Charles W. Stewart
 Maynard P. Wood

Majors:

Ranson B. Cribbage
 Joseph T. Gillen
 Lewis C. Miller
 Vincent G. Oberg
 Frederick L. Schumm

BOOK REVIEWS

PARATROOPER. By Lt. Col. Francis X. Bradley and Lt. Col. H. Glen Wood. The Military Service Publishing Company, 1954. 96 pages. Illustrated; \$3.50.

Reviewed by

LIEUT. GENERAL L. L. LEMNITZER
GS, Dpy C/S for Plans and Research

Paratrooper captures in picture and text the spirit of the American Paratrooper. It highlights by means of many excellent photographs the story of the U. S. Army's airborne soldier—his training, his history, his traditions—all done with skill and warmth by two outstanding airborne officers. This book will be of absorbing interest to the airborne veteran of World War II and Korea as well as to the young trooper just finishing jump school, and will prove a great attraction to the family and friends of those who wear the parachute badge.

Parachute jumping is an inherently dramatic subject and offers many opportunities for eye-catching photographs. The authors have done an excellent job of selecting striking and informative shots around which to weave a picture history of the airborne. In fact, this is probably the finest collection of airborne photographs ever published in one handy volume.

Beginning with the volunteer reporting to jump school, the first section of the book carries the would-be trooper through the various phases of his training. The physical toughening exercises and the mental hazards of the mock tower and the 250 foot tower are demonstrated in pictures which are artistically excellent as well as being exciting and informative. Finally, the climax of the airborne training, the jump itself, and the triumphant moment when the wings are pinned on are effectively depicted in word and picture.

After this introduction to airborne life, *Paratrooper* ranges in an orderly sequence over subjects which explain the appeal and adventure of airborne service and the proud traditions which have already been established in less than fifteen years. There are sections on the history of famous airborne units, on the

planes which carry the trooper into battle, on the equipment he uses in battle, on aerial supply and airborne doctrine, on the risks of jumping and the camaraderie of life in the airborne. The action shots of American airborne units in action in Africa, Europe, and the Pacific in World War II and in Korea add a grim note to a generally lighthearted treatment of an airborne soldier's life and will arouse twinges of nostalgia in many a veteran trooper.

The text that accompanies the pictures is clear and brief and to the point. In terse, straightforward language touched with humor and insight the authors describe what it means to sweat out a jump, show the almost indescribable feeling of exhilaration that accompanies the opening shock of the parachute, or explain the purpose of our modern airborne equipment. Each caption is written so as to be fully intelligible to the non-military reader, and technical language is held to the minimum—features which make this book an excellent gift and souvenir for the folks back home. Of special interest to readers of the *ANTI-AIRCRAFT JOURNAL* is the fact that the authors, Colonel Bradley and Colonel Wood, both served as antiaircraft artillery officers during World War II. They have done an excellent job of capturing the essence of what gives a paratrooper his *esprit de corps* and aggressiveness and what makes our airborne units such splendid fighting organizations.

Paratrooper fully lives up to its promise in the opening paragraph to tell "the story of a man, a rugged fighting man—the most modernly equipped, fastest moving, hardest hitting soldier in the world." This is a book which once opened will keep you browsing until each page is thoroughly explored. In the process you will understand and admire our American soldiers who jump to fight, and will comprehend something of the rugged life and great accomplishments which give them their fierce pride. These pages will also help explain why the Nation can place such great confidence in the U. S. Army and the fighting men who compose it.

A SOLDIER'S RECORD. By Field Marshal Albert Kesselring. William Morrow & Co., 1954. 381 Pages; Illustrated; Maps; Index; \$5.00.

Reviewed by

MAJ. GEN. AARON BRADSHAW

This is the intimate story, frankly told, of a distinguished German soldier who kept his sense of balance during many critical years. He was a great soldier who had the character and integrity to be great, both in victory and defeat.

In 1936 Kesselring was made Chief of Staff of the Luftwaffe. But he later had disagreements with Milch (Secretary of State and Deputy to Goering in the Ministry). As a result, he asked for and was given a field command. This was a very important step in Kesselring's career as it gave him an opportunity to exercise command and also placed him in a position where he was immediately available to take a large air command when hostilities commenced.

It is particularly interesting to read the Field Marshal's comments with respect to the attitude and the actions of the Russians along the German-Russian border after the Polish campaign. He says the Russian fighters fired on German aircraft; they showed little friendliness even to the point of withholding necessary weather reports. In other words, the Russians have a "form," and they run true to form at all times.

The Field Marshal pays a great deal of attention to an explanation of the bombing of Rotterdam. In his explanation, a failure of certain communications at important moments is brought out. All in all, his story is convincing and if you accept the premise Kesselring was an honorable general, you may accept his statement as being the picture as he saw it.

The Battle of Britain is not given much space in the book. It was a failure and he discusses the various facets of the battle to make it clear that there were reasons for the failure. He points out that Goering initially wanted air warfare banned by international law, and he makes the argument that the air raids on open cities were first flown by the RAF.

One of the interesting things about Kesselring is that he apparently thinks in terms of all three services, Army,

Navy and Air, having in mind the importance of balanced forces and coordinated offensives—something a great many people think about but not many practice.

Throughout the story of the various campaigns, Kesselring mentions that Hitler greatly underrated the importance of the Mediterranean Theater possibilities; in fact, Kesselring often points out the great importance he placed on that area.

The author stresses the great importance of the capture of Malta in order to strangle the Allied line of communications through the Mediterranean. On the other hand, there was Rommel and OKW backers who felt that Egypt was the target. At any rate, Kesselring did put an air attack on Malta which he says was completely successful and that a landing could have been made there on 10 May, and it was a grave mistake not to have made such a landing. In fact, he feels that Italy should have taken Malta at the outset of the war. At the time Kesselring got started in the North African campaign in early 1942, Rommel had just had some success and wanted to go on to Cairo, saying he could make it in ten days. So Malta was shelved in favor of Cairo. Kesselring feels that was a decisive action.

The Field Marshal's estimate of the situation as given in his book (regardless of what he may have actually estimated it in 1942) is a very fine bit of G2 work. However, Hitler and his Wehrmacht operation staff (1) never gave sufficient importance to the Mediterranean Theater, and (2) misjudged the objective of the Allies' invasion (North Africa). Kesselring makes two comments that are interesting: he says Montgomery "played for safety," and was methodical; he also says Rommel should have been removed because of the disharmony that existed between Rommel and the Italians.

Kesselring states his strategic objective was to keep Eisenhower's armies separate from Montgomery's. His problems were many and most difficult and even with complete cooperation and resources he would have had a job on his hands. But during this important campaign Kesselring surprisingly enough complains that Rommel was dispirited and his heart was not in the job, and there was a certain pig-headedness on the part of both Rommel (who was opposite Montgomery) and von Arnim (who held the front

against Eisenhower).

Once a landing was made at Salerno, Kesselring gave his attention to his withdrawal up the boot with stands at the better topographical lines. At the same time he had to set up an Italian government, and as it finally worked out Kesselring feels it would have been simpler to have fought the war in Italy without any Italian government.

The Field Marshal goes into some detail in discussing the battle along the Cassino line and he rightly concludes that it was a German success. Considering the relative forces involved, he can take much satisfaction in this determined fight by the Germans.

The Field Marshal makes a good case for fighting the battle for Italy. His principal point is that with the battle not fought as it was, the heart of Germany would have been seriously threatened by the capture of the Brenner Pass area.

The Field Marshal's comments on the partisan war in Italy are written quite feelingly. He refers to it as guerrilla warfare and to indicate more clearly its implications he states that their strength was between 200,000 and 300,000 men toward the end of the war. He gives a very good description of the partisan organization and in well-selected words describes the nature of their operations including the professionally trained reconnaissance group at one extreme, and the riffraff of murderers and robbers at the other end.

There is no escaping Kesselring's intention to place part of the blame for what he calls "a violation of all the rules of law" on the Allied high command and on the Italian government of General Badoglio.

The Field Marshal describes in some detail the steps he took and had to take as a commander of a force from the theater of war to protect his men from this guerrilla warfare, and he says, "Unless one wanted to commit suicide, he had to reverse his natural feelings." It would be profitable to military men of countries who may get into civilized war in the future to read his chapter on this very distasteful and critical part of his service.

The transfer of Kesselring to Commander-in-Chief, West, came rather suddenly, having been precipitated by the fall of Remagen. Kesselring's immediate

situation was 55 German divisions in various states of depletion opposed to 85 Allied divisions. The Luftwaffe in the west was not under his immediate command, but operated from a high command in the rear. The enemy was not only superior in numbers and matériel but much superior in the air.

OKW must have been in desperate straits because all the additional strength they could turn over to Kesselring was one "full division!" However, Kesselring did not expect any sudden collapse. He apparently was dumbfounded when the Americans crossed the Rhine at Oppenheim, as he had warned his army commander of the possibility of that attempt. This crossing left the way to Frankfurt open and permitted the decisive blow at Aschaffenberg, 27-28 March, to take place. Following that, there was a crossing by the French of the lower Rhine. With the Rhine breached in the north, the center and the south, the story from then on is one of constant reverses. During his attempts to re-form in the midst of such reverses, Kesselring even gave thought to a counterattack on Patton's left flank!

When it came time to surrender, Kesselring's last thoughts were for his troops. He thanked them and asked them to conduct themselves properly.

It is difficult in this short review to try to describe Kesselring's feelings at the final moments of surrender; a most difficult time for his human emotions.

The charges on which Kesselring was tried, the new rules of international law that were applied *ex post facto*, the lack of attention to the accused's rights or the sentence itself can give little satisfaction to anyone connected therewith. It is a matter that might well be made a study for joint understanding by statesmen and defense officials, for in the future if the men in arms are to be held responsible to the new rules followed in the courts of Nürnberg and some of the other post-war trials, there is only one place for the American soldier to be, and that is on the winning side. Particularly important is the new rule under which a soldier must be responsible for the political orders of his government and must decide when to follow them and when to oppose them! In other words, when does he disobey an order given by his government, and when does he carry it out? Kesselring's discussion of this whole

subject of the trials and the legal status of an officer is very well done. Or perhaps all the above may be pure theory, since the Communists follow no civilized rules of war or court trials.

It might be well to close this review with an extract from his closing pages, a statement in regard to himself wherein he walks out at the end of the book with his head held high and a philosophical attitude towards life. "The condemnation by Pharisees cannot touch a man who has or has had some self-respect. My life has been rich because it was filled with work and cares and responsibilities. It was not my doing that it had to end in suffering, but if in this situation I can and may still be something to my comrades, if men of standing are still glad to have a talk with me, this is a great grace."

THE REASON WHY. By Cecil Woodham-Smith. New York: McGraw-Hill Book Company, Inc. 287 pages. \$4.00.

While few American soldiers are familiar with the Crimean War, it would be difficult to find a war which, in its negative examples, is more instructive. Therefore, the author of *The Reason Why* has performed a service of real value in producing a book which is so interesting and well written that it is bound to reach a wide audience and thereby focus attention upon an undeservedly ignored episode.

The Reason Why, however, is not primarily about the Crimean War. Essentially, it is a biographical study of the two men, the Earls of Lucan and Cardigan, through whose mutual antipathy and psychological deficiencies the tragic Charge of the Light Brigade ultimately took place. Through the story of the lives of these two, the British Army of the first half of the last century is assessed, and the fallacies of its administration and organization are brought into clear focus.

The basic fault was the concept of maintaining the officer corps of what were considered the "best" regiments—the units which provided virtually the only route to senior rank and higher command—as the exclusive preserves of the aristocracy. The direct consequence was the system of promotion by purchase, used not only to permit rapid advancement for the well-to-do but also, quite shamelessly, as a means for officers

of private fortune to avoid field service in the colonial conflicts and border wars which occurred. Such a system led to the selection of top commanders who, if courageous, were hopelessly incompetent when they finally went into action in a full-fledged war.

In one sense, *The Reason Why* is disappointing. No effort is made to examine the Crimean War as a stage in the development of warfare as a whole. Such analysis would be of particular interest, especially by way of comparison with the American Civil War, which began only five years later. However, the author does present a clear picture of what happens to an army which, while strong in discipline and drill, is lacking in competent and understanding leadership and cursed with inept staff work, especially in the field of logistics.

Undoubtedly, the lessons of the Crimean War had a great impact upon the British Army, as the author points out, and very likely upon European armies as well. The statement that it resulted in sweeping reforms in the United States Army's system for procuring and promoting officers, organizing and operating administrative services, and providing higher level training is not based on any knowledge of American military development. The fact is that the first American Army service school—the Artillery School of Instruction at Fort Monroe—antedated the Crimean War by more than thirty years. The American system of procuring potential officers from the country at large, with regard both to geography and socio-economic standing, had been formally in operation since the establishment of West Point in 1802. True, the American Army had many deficiencies, but they were not the same as those of the British Service.

The army of any nation, of course, is a reflection of the social pattern of that nation. Thus, in a Britain in which virtually all positions of influence and responsibility were reserved for the aristocracy, the Army was aristocratic as well as well as hierarchical. It is as an examination of the military aspects of that social pattern that *The Reason Why* is of such interest. This is an aspect of military study which has been less thoroughly examined than it deserves. In the light of that fact, *The Reason Why*

offers unusually great rewards to the military reader.—LIEUT. COL. JOHN B. B. TRUSSELL, JR.

FROM THE DANUBE TO THE YALU. By General Mark Clark. Harper & Bros. 369 Pages. \$5.00.

This is General Clark's personal story of his years of experience with the communists. His two years in Austria served to alert him to the coldblooded, persistent, calculating, and eternal struggle which the Kremlin directs toward world subjugation. That is background. This book is devoted to General Clark's experience in the Far East. He writes of the main stream of events, which he understands well and discusses in pungent manner.

The theme of his story: "I believe we could have obtained better truce terms quicker, shortened the war and saved lives if we had got tough faster." And now we could add "and stayed tough, period."

The book includes an excellent story of the incredible events in the POW compounds on Kojima incident to the kidnapping of General Dodd. But like others, he fails to stress that General Dodd and other local POW authorities simply did not have anything like adequate force for the job.

General Clark's complaint that he was denied the logical military step of bombing Chinese targets beyond the Yalu is the same as was MacArthur's, perhaps less pointed, even if far more generally accepted now as the perspective clears. His comments throw some light on the study of the proper relationship between the military and the civil authorities, and therefore has particular interest in its bearing on the current trend toward closer civil control of the Armed Forces.

General Clark is frank enough about his troubles with ROK President Syngman Rhee. He found this venerable and wily politician a complicated sum of violent hatred for anything Japanese, distaste for communism—both understandable enough—self-aggrandizement, solicitude for his native land, and pure guile.

In the agonizing period during which efforts were being made to arrive at an armistice with the Reds, says Clark, "like a lighted fuse sputtering toward the powder barrel, President Syngman Rhee threatened to wreck any armistice we

signed. And he very nearly did so when he ordered his ROK army to release 27,000 Korean prisoners in the U. N. compounds." To us Rhee's action was quite logical.

And finally Clark's solution for occupation in Korea is to get out. Then he would have us carry out our obligations to our friends in Korea by the threat of Massive Retaliation. Which leads us to doubt that the author has yet worked out the solution for the very vital problem we have in Korea and South East Asia. It will take more than the atom bomb.

FROM FLINTLOCK TO M1. By Joseph W. Shields, Jr. Coward-McCann, Inc. 220 pages. \$7.50.

The author sketches in the development of the U. S. Army rifle from the erratic U. S. Flintlock Musket, Model 1795 of the Revolution down to the M1 of today. This he does in a very readable manner and on the illuminating and fascinating background of the history of our country and its Army. He manages to put the soldier's basic weapon and the basic soldier back of the weapon in perspective.

* * * *

"And yet, A-bomb or no A-bomb, the rifleman is the keystone about which all military operations are constructed. Every large-caliber weapon is designed to support him, and similar enemy weapons are directed towards killing him. Why, then, should a dwarf be the target of a battle among giants?"

* * * *

"The limits of an entire nation's power are delineated, not by how far its bombers penetrate, nor by where its guided missiles land, but by where its infantrymen are. Not until a rifleman plants his G.I. boots on a piece of soil and begins to dig in do we hold that piece of ground."

* * * *

"The drift of the matter is that rifle development is an incalculably important military issue even today, and since those armed with it do most of the dying, their need for the newest and best weapon hardly seems excessive. The rifle is not a combat relic, despite the idea, which periodically becomes accepted as dogma, that ground fighting will soon dwindle

into a sort of mopping-up operation, like Arab women and pariahs cleaning up after a battle."

* * * *

Mr. Shields traces the development of the army rifle continually in comparison with the hunter's firearms, in which he stresses his idea that the huntsman was usually far ahead. He also amazes us when he tells of a number of improvements having been introduced by obscure gunsmiths entirely unaware of the importance of their contribution.

This work is attractively presented with liberal use of sketches and with engaging stories to provide clear perspective of the Army tactics and the life of the period.

FRANKLIN D. ROOSEVELT: THE ORDEAL. By Frank Freidel. Little Brown. 320 Pages; \$6.00.

This is the second volume of a projected six-volume life of the late President. The first volume, The Apprenticeship, brought us through World War I. The Ordeal covers those years from the end of his career as assistant Secretary of the Navy till his election as Governor of New York in 1928.

This includes his 1920 campaign as the Vice Presidential candidate with Cox; the brief career on Wall Street; the beginning of polio; the concentration on the cure; and all the while his dealings with party leaders and bosses and his build-up as a national figure in Democratic circles. All culminating in his spectacular election as Governor.

It is an authoritative and sympathetic study, well documented and in delightful narrative. But it is far from hero worship; along with the triumph of genius, we get to see the other side, too. We also see some choice bits of F.D.R.'s private correspondence.—C.S.H.

REBIRTH AND DESTINY OF ISRAEL. By David Ben Gurion. Philosophical Library. 539 pages. \$10.

The author has recently laid down the reins of office as the Prime Minister of Israel and retired. For years he has personified the Jewish struggle for independence and a homeland.

The book is no autobiography nor is it a connected narrative of the struggle for Israel. Rather it is a collection of the addresses and essays of David Ben Gur-

ion during the period, 1915 to 1952. They typify the efforts of the resolute leader and politician in a practical world, yet one guided by lofty purpose and inspired with hope.

THE AIRCRAFT OF THE WORLD. By Wm. Green and Gerald Pollinger. Random House. \$5.95.

Over 1000 superb illustrations. Every aircraft in flight today, with specifications and performance data. For students in aircraft recognition and trends in design.

THE FUNDAMENTALS OF WORLD PEACE. By A. Hamer Hall. Philosophical Library. 112 pages; \$3.00.

A thoughtful and historical study by an author and student of the principles of peace and government.

THE RECAPTURE OF GUAM. By Major O. R. Lodge, U.S.M.C. Presented by the Historical Branch, G-3, Headquarters United States Marine Corps. 214 pages and excellent maps.

The twelfth in a series of operational monographs presented by the U.S.M.C. to provide an accurate and detailed account.

AMERICAN CONSTITUTIONAL CUSTOM: A FORGOTTEN FACTOR IN THE FOUNDING. By Burleigh Cushing Rodick. Philosophical Library. 244 pages. \$4.75.

U. S. ARMY IN WW II: European Theater of Operations; Logistical Support of the Armies, Volume 1. By Roland G. Ruppenthal. U. S. Government Printing Office. 616 pages. \$4.50.

ASIA AND WESTERN DOMINANCE. By K. M. Panikkar. John Day Pub. Co., New York. 530 pages. \$7.50.

THE FUNDAMENTALS OF WORLD PEACE. By Hamer Hall. Philosophical Library. 112 pages. \$3.00.

NUCLEAR PHYSICS. By W. Heisenberg. Philosophical Library. 539 pages. \$4.75.

CLIMATE, VEGETATION & MAN. By Leonard Hadlow, B.A. Philosophical Library. 288 pages.

THE NEMESIS OF POWER. By J. W. Wheeler-Bennett. St. Martins Press. 829 pages. \$12.00.

UNITED STATES ARMY THE CHIEF OF STAFF

TO THE MEMBERS OF THE UNITED STATES ARTILLERY

On behalf of your fellow soldiers, I extend congratulations to the members of the Artillery on the occasion of the 179th anniversary of the establishment of your arm as a basic element of the United States Army.

As the only part of the Army with an unbroken record of active service from the Revolution to the present, the Artillery may justly take pride in a long and honorable tradition. Its gallant actions against enemies on ground, on sea, and in air are brilliant parts of the splendid history of the United States Army.

The valor, the competence, and the devotion to duty which have characterized the United States Artillery during all the years since its establishment assure the quality of its performance in any trials ahead.

M. B. RIDGWAY
General, United States Army
Chief of Staff

HONOR ROLL

Continued from cover 2

738th AAA Gun Bn
Lt. Col. M. C. Johnson
739th AAA Gun Bn
Maj. R. D. Fobes
746th AAA Gun Bn
Col. K. S. Gray
747th AAA Gun Bn Mass.
Lt. Col. J. F. Kane
752nd AAA Gun Bn
Lt. Col. D. T. Chapman
753rd AAA Gun Bn
Lt. Col. B. H. Johnson
764th AAA Gun Bn
Lt. Col. E. D. Winstead
865th AAA AW Bn SP
Maj. F. R. Whitehead
870th AAA Bn N. Y.
Maj. J. T. Blow
903rd AAA AW Bn
Lt. Col. V. Blekaitis
933rd AAA AW Bn
Maj. W. R. Bullard
950th AAA AW Bn Ga.
Lt. Col. J. P. Wallis

951st AAA Gun Bn Calif.
Lt. Col. J. B. Lindeman

Operations Detachments

34th AAA Det Opns
Maj. J. Sweryda
114th AAA Det Opns Dela.
Maj. G. F. Kelley, Jr.
131st AAA Det Opns S. C.
Maj. W. C. Fore
151st AAA Det Opns Penn
Maj. F. J. Slivka
177th AAA Det Opns
Capt. J. J. Niehoff
184th AAA Det Opns Calif.
Capt. M. C. Teschendorf
327th AAA Det Opns
Maj. W. R. Webster
501st AAA Det Opns
Maj. C. A. Cofer
504th AAA Det Opns
Maj. W. G. Mathews
508th AAA Det Opns
Lt. L. J. Torres
509th AAA Det Opns
Maj. J. P. Bodkin

512th AAA Det Opns
Capt. T. E. Amlong
513th AAA Det Opns
Maj. R. G. Tippet, Jr.
514th AAA Det Opns
Capt. P. E. Brumley
517th AAA Det Opns
Capt. R. W. Monroe
525th AAA Det Opns
Maj. L. D. Fournier

JOURNAL HONOR ROLL CRITERIA

1. Brigades, groups, battalions and other units of comparable size with 80% subscribers among the officers assigned (exclude Medicos, Chaplains, and those on DS) are eligible for listing.
2. To qualify or to requalify for a listing on the JOURNAL Honor Roll, units submit the names of subscribers and a roster of officers assigned to the unit on date of application.
3. Units remain on the Honor Roll for one year after qualification or requalification.

TODAY'S MILITARY PROBLEMS *Demand*

PIN POINT ACCURACY

To advance you must keep abreast of the times—and the requirements get tougher every day.



PARATROOPER

By Lt. Cols. Francis X. Bradley
and H. Glen Wood

He's the fastest-moving hardest-hitting soldier in the world. And here is his gripping story, told for the first time in a combination of text and magnificent collection of action-packed photographs. This new book is the only one in print to give you the U. S. paratrooper's complete life: His training, his airborne heritage, the way he fights, the risks he takes, the grim humor he likes. Foreword by Gen. Matthew B. Ridgway, Chief of Staff, U. S. Army. The perfect gift that all airborne men send their friends and relatives.

96 large pages. \$3.50

ATOMIC WEAPONS IN LAND COMBAT

By Cols. G. C. Reinhardt
and W. R. Kintner

A new and revised second edition of THE book about THE weapon! This is the first book to explore the tactical use of atomic weapons on the battlefield. Tells you the facts about atomic warfare in plain, simple language, from equipment and tactics to the question of what you can do to protect yourself in the case of atomic attack.

Over 200 pages \$3.95

THE OFFICER'S GUIDE

The latest edition of the reference work that has become as much a part of an Army officer's equipment as his uniform. Indispensable in conduct of professional duties and personal affairs.

\$4.00

THE NONCOM'S GUIDE

The latest edition of the complete book of knowledge for the ambitious soldier. A constant companion of soldiers and Noncoms who want to get ahead.

\$2.50

COMPANY ADMINISTRATION and the Personnel Section

(NEW TWENTY-THIRD EDITION)

By Col. C. M. Virtue

The latest and best edition of the Army's popular standard reference work on unit administration. Covers new Sick Slip and Duty Roster plus new material on management.

\$3.75

Other Books Servicemen Can Rely On

★ PRINCIPLES OF INSURANCE and Related Government Benefits for Service Personnel

This West Point text book is completely impartial in giving you all the insurance facts you need. It tells you how to plan your insurance needs throughout your career to insure adequate benefits for your family.

\$1.50

★ THE ARMY WRITER by War- rant Officer David Klein

How to write easily, correctly forcefully. All types of military writing are covered plus professional writing for money.

\$3.00

★ SERVICEMAN AND THE LAW by Cols. Edwards and Decker

Full details on trials, charges, record of trial, duties of investigating officer, defense counsel, plus others.

\$3.75

★ THE RED ARMY TODAY by Col. Louis B. Ely

Only in this book do you get full information on the Soviet war machine and its satellites. Detailed comparisons of organization and equipment.

\$4.00

★ RED CHINA'S FIGHTING HORDES by Lt. Col. R. B. Rigg

All the facts on the Chinese Communist Army based on field service with Chinese troops. Covers organization, training, tactics, logistics and a realistic evaluation of troops.

\$4.00

order through

ANTIAIRCRAFT JOURNAL

631 Pennsylvania Avenue, N. W.

Washington 4, D. C.

